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Ref. No. 1872209.02/015435.00010

March 1, 2019

(VIA US MAIL AND EMAIL)
Michelle Mullin, Project Manager
USEPA REGION 10
1200 Sixth Avenue
Mail Code: OAW-150
Seattle, WA 98101
Mullin.michelle@Epamail.epa.gov

Re: Rainier Commons – Substrate Report Compilation Requested – Phase I Close Out

Dear Ms. Mullin,

We received your request for a substrate report compilation, transmitted via email on February 22, 2019, through EPA attorney Lynne Davies. Enclosed with this letter please find the reproductions and special compilation, as requested.

Your request is reproduced here for ease of reference:

- The status of pre-clearance and post-clearance substrate is unclear. The 12-18-2013 RBDA requires in Condition 8 in part that Rainier collect verification samples of concrete and any other substrate (clarified as any substrate other than brick in the Phase 1 IPWP approval 6-17-14) with a minimum of three samples per substrate. Data shall be sufficient for EPA to conclude that the visual performance standard is adequate to verify both removal of PCB bulk product waste and that no further cleanup is likely to be required for the remaining substrate.
    - The data Rainier has submitted does not clearly demonstrate adherence to the conditions of the RBDA. Rainier shall submit to EPA a full and complete description of substrate sampling activities. All information shall be submitted in one package rather than spread throughout multiple workplans and letters. Rainier shall demonstrate to EPA that Condition 8 of the RBDA has been met through the description of activities including where, when and how the substrate was sampled; diagrams demonstrating where samples were collected; photo logs; summary tables including sample name, location, substrate type, and PCB

> results; and full lab packages with supporting data. This should be completed for all pre-abatement samples as well as post-abatement samples. This information is necessary for EPA to determine if any additional action, including sampling and/or additional abatement or controls are necessary to prevent risk of harm to health or the environment.

Your request references both "pre-abatement samples as well as post-abatement samples." Pre-abatement substrate samples were not required or collected. The paint needed to be removed first, in order to get down to the substrate. We are providing the requested compilation for all required post-abatement, or verification substrate samples.

We collected pre-clearance samples, after the blasting work and before the hand grinding work was complete. These were collected for Rainier Commons internal reference and evaluation. It assisted our understanding of the effectiveness of the blasting work – highly effective – and gave a baseline to evaluate the benefit and utility of the additional hand work following blasting – low returns for the time, effort and cost. These samples were not required, but we reported the results to EPA in the July 10, 2015 Close-Out Report and accurately labeled them as Pre-Clearance samples.

The enclosures to this letter are itemized as follows:

1. Substrate Verification Compilation Summary with attachments;
2. Attachment 1 – EPA approved sampling plan, Exhibit 11 to the approve IPWP Phase I, reproduced;
3. Attachment 2 – Substrate Sampling Report, Exhibit 2 to Phase I Close Out Report, reproduced;
4. Attachment 2A - Subset of illustrative Phase I photographs;
5. Attachment 2B - Illustrative Schematics;
6. Attachment 2C – Balance of laboratory QA/QC 2014 pre-clearance (38 pages)
7. Attachment 3 – September 28, 2018 supplemental response to EPA, reproduced;
8. Attachment 4 – October 9, 2018 supplement to EPA, reproduced; and
9. Attachment 5 - Compilation Table Phase I substrate sampling results

We trust this compilation will be helpful to you in finalizing your approval of the Phase I Close-Out Report.

Very truly yours,

RYAN, SWANSON & CLEVELAND, PLLC

Jo M. Flannery
Attorney Of Counsel

1872209.02

JMF:raw
Attachments
cc: Lynne D. Davies (via email - Davies.lynne@Epamail.epa.gov)
Richard Allan (via email - Allen.richard@Epa.gov)
Client

Substrate Verification Compilation Summary

Introduction and Purpose. The first purpose of the substrate sampling was to demonstrate that PCBs have not migrated from the dried applied paint into the substrate surfaces. The second purpose was to establish that when the paint is removed, such that it meets the Visual Clearance Standard, the surface has in fact been adequately remediated. Substrate sampling on all types of substrates (including brick, mortar, concrete and sandstone) proves that the Visual Clearance method is a reliable means to confirm that the required work is complete. Accordingly, the substrate sampling requirement should now be removed from future phase IPWP requirements.

Re-packaged Compilation Requested. As requested by the EPA on February 22, 2019, all previously submitted Phase I substrate sampling information is here compiled. The purpose is to assist EPA in its determination that all work required for Phase I is complete. In addition, determine that the visual performance standard, already approved for brick and mortar, is a reliable means to verify the required removal of PCB containing paint from all concrete and sandstone substrates, for future phases of work.

Approved Sampling Plan and Methodology. The substrate verification sampling methodology is set forth in the Individual Phased Work Plan (IPWP) for Phase I, at Exhibit 11. The sampling plan, entitled *Sampling Plan for the Verification of Concrete Substrate Once Visual Clearance Standard Met*, was developed by Rainier Commons' independent testing laboratory – NVL Labs – on April 2, 2014 and subsequently approved for use by the EPA as part of the IPWP Phase I Approval, dated June 17, 2014. The approved sampling plan provided the basis for all subsequent actions and activities including sampling locations (see photos in sampling plan), sampling methodology, chain of custody, analysis, and QA/QC information. (Approved Sampling Plan Reproduced here as Attachment 1).

Substrate Sampling Report, Exhibit 2 to July 10, 2015, Phase I Close Out Report. Much of the content in this compilation was originally submitted to the EPA as Exhibit 2 to the Individual Phased Work Plan (IPWP) Phase I Close-Out report dated July 10, 2015. The Exhibit 2 report contains two tables. One for Pre-Clearance or preliminary sampling data for samples collected August 4, 2014, September 29, 2014, and October 9, 2014. The Pre-clearance samples were collected after blasting work, but before all hand grinding finish work was performed. These pre-clearance sample results were reported for information purposes only as Rainier Commons has been providing all sampling data to EPA.

More importantly, the July 10, 2015 report contains a second table showing the required Post-Clearance Compliance sampling data for samples collected on December 12, 2014 and January 30, 2015. These samples were collected consistent with the approved Sampling Plan (Attachment 1). The text of the report states that the samples were collected pursuant to the approved sampling plan. Again, sampling locations were identified in the approved Sampling Plan and were referenced with location descriptions such as Building 13 West Elevation, in the verification Sampling Report.

The two tables in the substrate verification sampling report (pre-clearance and post-clearance) summarized all pertinent sample data. The tables show a listing of the sample collection date, sample ID number, sampling location, substrate type, and sample results in parts per million ("ppm"). The report also contains full laboratory reports with supporting data. (Attachment 2 hereto is a reproduction of

Exhibit 2 to the July 10, 2015 Close-Out Report). Photographs are also included as Attachment 2A, for ease of reference, as requested.

Schematic Diagrams With Sample Results Reproduced. As a supplement to the substrate reports already provided we attach schematic diagrams (Attachment 2B). The diagrams at Attachment 2B display the sample collection locations with the individual sample identification numbers listed in the laboratory reports and include the laboratory result for each sample. These diagrams provide an additional depiction of information previously provided in the sampling plan and sampling reports.

QA/QC for Laboratory Reports: Laboratory reports were provided with the July 10, 2015 Close-out Report (see attachment 2). Attachment 2C contains the balance of the QA/QC for the laboratory reports.

Response to EPA's Close Out Report Comments and Questions. After EPA's completion of the Phase I Close-Out Report review and preliminary approval of the Phase I Work, on July 13, 2018 the EPA provided a list of additional comments and questions regarding the IPWP-I Close-Out report. Question 2 asked about the availability of a post-clearance sample for Building 10-West (Building 10 and 11 have different building numbers on the Rainier Commons campus map, but they are connected). After determining that a companion sample for the Building 10 portion of the Building 10/11 west façade had not been collected, Rainier Commons collected an additional sample from the Building 10-West location, July 17, 2018. Laboratory analysis of this sample confirmed a Non-Detect result. No PCBs are present above the Reporting Limit of 0.98 PPM. The results were reported to the EPA on September 28, 2018. This report included a full laboratory package as well as location, substrate type, and photographs, documented in field notes. (Attachment 3).

Review of Substrate Sampling Results. During the process of responding to the EPA's request for additional information (EPA comments and questions July 13, 2018) a further review of all post-clearance sampling was conducted. Of the seven Phase I post-clearance substrate samples collected, five samples were Non-Detect for PCBs. Two samples contained detectable levels, but were just over 1 ppm. These results demonstrate that PCBs did not migrate into the underlying substrates, clearing concrete and sandstone in addition to brick and mortar.

Additional Verification Samples. Two additional substrate samples were collected September 27, 2018 at locations immediately adjacent to the two previous post-clearance sample locations with the results just over 1 ppm. *EPA Standard Operating Procedure of Sampling Porous Surfaces for Polychlorinated Biphenyls (PCBs)*, Section 9.1.1. was followed. Laboratory results for these tests indicated Non-Detect for PCBs. These results were reported to the EPA on October 9, 2018. This report included a full laboratory package as well as location, substrate type, photographs, and field notes. (Attachment 4 hereto).

Compilation Table. The compilation table (Attachment 5 hereto) combines the information previously reported in the two separate tables in the July 10, 2015 Close-Out Report (Ex. 2 thereto) with the additional follow-up substrate testing results reported to EPA on September 28, 2018 and October 9, 2018. These sample results demonstrate the success of the Phase I work. No further work or controls

are needed. It further demonstrates that substrate testing can be removed from future phased work for concrete and sandstone substrates, the same as brick and mortar.

ATTACHMENT 1

Condition 8 - Sampling Plan for Verification of Concrete Substrate Once Visual Clearance Standard Met

NVL Laboratories, Inc.
Office: (206) 547-0100
Fax: (206) 634-1936

Date: **April 2, 2014**

NVL Project No. **2012-949**

Site Address: **Rainer Commons**
3100 Airport Way S, Seattle, 98134

Introduction:

NVL Laboratories has prepared this ***Sampling Plan for Verification of Concrete Once Visual Clearance Standard Met*** to document procedures to ensure paint removal project as outlined in the Rainier Commons Work Plan dated March 25, 2013, revised July 25, 2013 ("Work" or "Plan"), are meeting the requirements of the EPA risk based approval for the Plan.

As a part of Condition 8 of EPA's approval of the Plan, Rainier Commons must collect verification samples of concrete and any other substrate type not analyzed as part of the September 2011 RBDA demonstration project once the visual standard for paint removal is met.

Summary of Requirements in Condition 8

1. Rainier shall use the grid system established in Condition 7 and collect a minimum of three samples per substrate, per phase of removal activity covered by the IPWP. As part of the IPWPs, Rainier shall devise a detailed sampling plan that will ensure that the data collected are representative of the PCBs that may remain in the substrate, if any, and include an analysis of the representativeness in their sampling plan.

2. The sampling plan shall also include sample collection methods, sample locations, and QA/QC. Sampling shall follow the guidelines provided in the EPA document titled Standard Operating Procedure For Sampling Porous Surfaces for Polychlorinated Biphenyls (PCBs), revised May 5, 2011 (SOP). The most recent version can be found at: http://www.epa.gov/regionl/cleanup/pcbs/pdfs/484692.pdf.

3. Data shall be sufficient for EPA to conclude that the visual performance standard is adequate to verify both removal of PCB bulk product waste and that no further cleanup is likely to be-required for the remaining substrate to satisfy the performance criteria of 40 C.F.R.761.61(c) and 761.62(c) of no unreasonable risk of injury to health or the environment.

References

The following lists the references used in this Sampling Plan. References are referred to in this document using the underlined titles.

- Work Plan = “Work” or “Plan” = Rainier Commons Work Plan Dated March 25, 2013 / Revised July 25, 2013

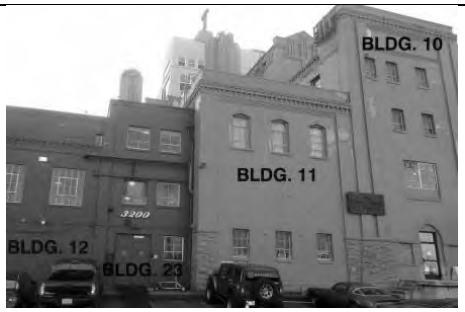
- EPA Sampling Procedure = Standard Operating Procedure For Sampling Porous Surfaces for Polychlorinated Biphenyls (PCBs), revised May 5, 2011 (SOP).

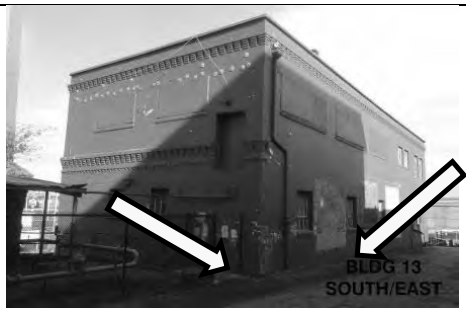
Locations for Testing

The Phase 1 Work includes Buildings 10, 11, and 13 and specifically the west elevation of Building 10, the west elevation of building 11, and all four elevations of Building 13.

Of these three buildings, only Building 13 has suitable locations for concrete substrate testing. There is no appreciable portion of painted concrete on the west elevation of Building 10 or Building 11. The concrete stairs and landing of Building 10 are not painted. (See also enlarged photographs of the Phase I work surfaces attached at the end of this Plan).

The following are photographs of the Phase I work surfaces where paint will be removed. The yellow arrows indicate the general location of the concrete substrate on Building 13

1		**Buildings 10 & 11** West Elevation
2		**Building 11** West Elevation

3		**Building 13** North Elevation
4		**Building 13** South and East Elevations
5		**Building 13** West Elevation

Four primary substrate samples will be collected, one each from the concrete area on the ground floor level at the west, east, north and south elevations of building 13, and one field duplicate sample will be collected, as outlined below. The samples will be collected from the grid-square located in the mid-field position on each elevation, as more particularly described below.

Sampling Methodology

A Certified Industrial Hygienist (CIH) will oversee all sample collection, analysis, data interpretation and reporting involved with the Work and the IPWPs, including this Sampling Plan.

Surface Preparation – Surfaces to be tested will have met the visual standard for paint removal as described in the Work Plan.

Sample Location Selection – Sample location will be selected by identifying the mid-field of each of the four concrete sampling areas, one on each side of Building 13. The following summarizes the method:

1. Using a rough calculation of the total square footage of the abated surface area ready for inspection, a record of the dimensions and calculation will be made on a separate set of Verification Sampling and Analysis Field Notes (the "Sampling Notes") (separate from or set off in a separate section from NVL's regular daily field notes);

2. Before the verification sampling begins, a simple diagram will be drawn of the inspection area in the Sampling Notes. The approximate center point of the area will be determined. These diagrams are to be carefully drawn, but hand drawn to approximate scale for record keeping purposes is acceptable. Perfect or exact scale drawings are not required.

3. NVL shall use its discretion to field measure and mark out the sampling area, in the most efficient manner possible with chalk or masking tape or other media.

4. NVL shall then collect the samples, pursuant to the SOP referenced above.

5. The sampling area shall be designated with the building number, the ordinal direction of the elevation or wall (N=north facing, S=south facing, E=east facing, W=west facing) and the level (G=ground, 1=first level of scaffolding and so on). So, for example, if the west facing wall of building 13 is sampled on the ground level the sample area will be designated in the Sampling Notes and in the photograph(s) as 13-W-G.

Sample Collection – Sample collection is done following the EPA Sampling Procedure. This includes:

- Sampling using an impact hammer drill to generate a uniform, finely ground, powder to be extracted and analyzed for PCBs, generating a minimum of 10 grams of sample material.

Chain of Custody

NVL's Standard Chain of Custody Procedures include:

- All samples must have an unique field sample number that will identify it, with specific collection details (including location/date/time) that cannot be reused.
- Personnel will maintain control and security of samples collected to prevent loss or possible tampering.
- A chain of custody form will be used to transfer custody of samples to the laboratory.
- The chain of custody form minimally includes fields for sample number, parameter for analyses, sample collection date & time, sampler, and custody transfer signature area.
- Samples collected will be properly stored and relinquished to the laboratory for analysis as soon as practical.

Analysis

Per the Condition, samples will be submitted to AIHA and WA Dept. of Ecology accredited laboratories to be analyzed for PCB Arochlor content via EPA Method 8082.

NVL Laboratories will be the primary laboratory used for the analysis. NVL meets the requirements of this Condition. (Accreditation documentation referenced below).

Laboratory turnaround time will be between 1 to 5 days depending on the need of the project.

Quality Assurance/Quality Control (QA/QC):

QA/QC details are necessary to ensure that the resulting data are of acceptable quality, including sensitivity, to be acceptable for comparison to EPA decision criteria.

Field QA/QC Procedures:

- Field Duplicates: To measure QA/QC for reproducibility and representativeness of results, a minimum of 10% of the samples collected in each set from each type of matrix will be "field duplicates", which are separate samples collected as close as possible to the same point in space and time. They shall be stored in separate containers, and analyzed independently. The method of selection of the location to collect the duplicate will be by using a random number generator to select one of the sampling locations. For example, if three locations are tested, a random number method will determine which location to collect the duplicate sample. The duplicate sample will be collected in the same manner as the other samples. Laboratory analysis results must be within 75 to 125 percent to be acceptable.

- Split Samples: To measure QA/QC for accuracy and reproducibility of results, "split samples" will be submitted to another laboratory that meets the qualifications identified in this document. A minimum of 5% of samples collected in the field will be collected similar to the method described for field duplicates. Laboratory analysis results must be within 75 to 125 % to be acceptable.

NVL Laboratories QA/QC Program: NVL Laboratories standard QA/QC procedures will also be in place. The QA/QC program in place is part of NVL Laboratories' existing multiple professional laboratory accreditations, which include recognition by The Washington State Department of Ecology (Ecology) – Accreditation ID C797 - for several listed chemicals, including PCB (Aroclor) analysis. NVL's practices and procedures in place to maintain Ecology Accreditation include:

- Periodic Laboratory Inspections by Ecology to monitor and accept NVL's laboratory facilities, laboratory procedures/practices and testing conditions.

- Routine involvement with the Proficiency Testing Program where samples are sent to NVL's laboratory and results are reviewed by Ecology to test the accuracy of analysis.

NVL Laboratories' QA/QC program includes the addition of surrogates, laboratory control sample (LCS) and LCS duplicate, matrix spike (MS) and MS duplicate and continuous calibration check (CCV) sample for all PCB analysis.

NVL Laboratories' professional laboratory accreditations and reference to QA/QC documentation can be found at: http://www.nvllabs.com/qualifications.htm

All samples will be managed under chain-of-custody control.

Equipment Decontamination

All nonporous tools and equipment used for sampling shall be cleaned and decontaminated before use, and after each sample is obtained. Porous materials such as grinding wheels/disks, if used,

cannot be reliably decontaminated between uses, and shall be discarded after each use. Cleaning/decontamination should be accomplished according to the following procedure:

1. Prepare two decontamination buckets, the first containing potable or organic-free water and a suitable residue-free detergent according to manufacturer's directions. The second bucket should contain potable or organic-free rinse water. Place all used tools and equipment in the detergent/water bucket, and scrub each piece thoroughly using a scrub brush. Next, rinse each item in the rinse bucket, then rinse with hexane, either from a laboratory wash bottle, or using a hexane-moistened paper towel or wipe. Take care to properly dispose of spent hexane and wipes. Place the cleaned and rinsed items on a clean surface in an area where free of dust from sampling activities, and allow to air-dry thoroughly prior to re-use.

2. Lightly-contaminated items and items that cannot be immersed in water (e.g., the motorized part of the coring device) may be cleaned by wiping with a hexane-moistened paper towel or wipe.

3. Clean, previously unused disposable gloves must be used at each sample location.

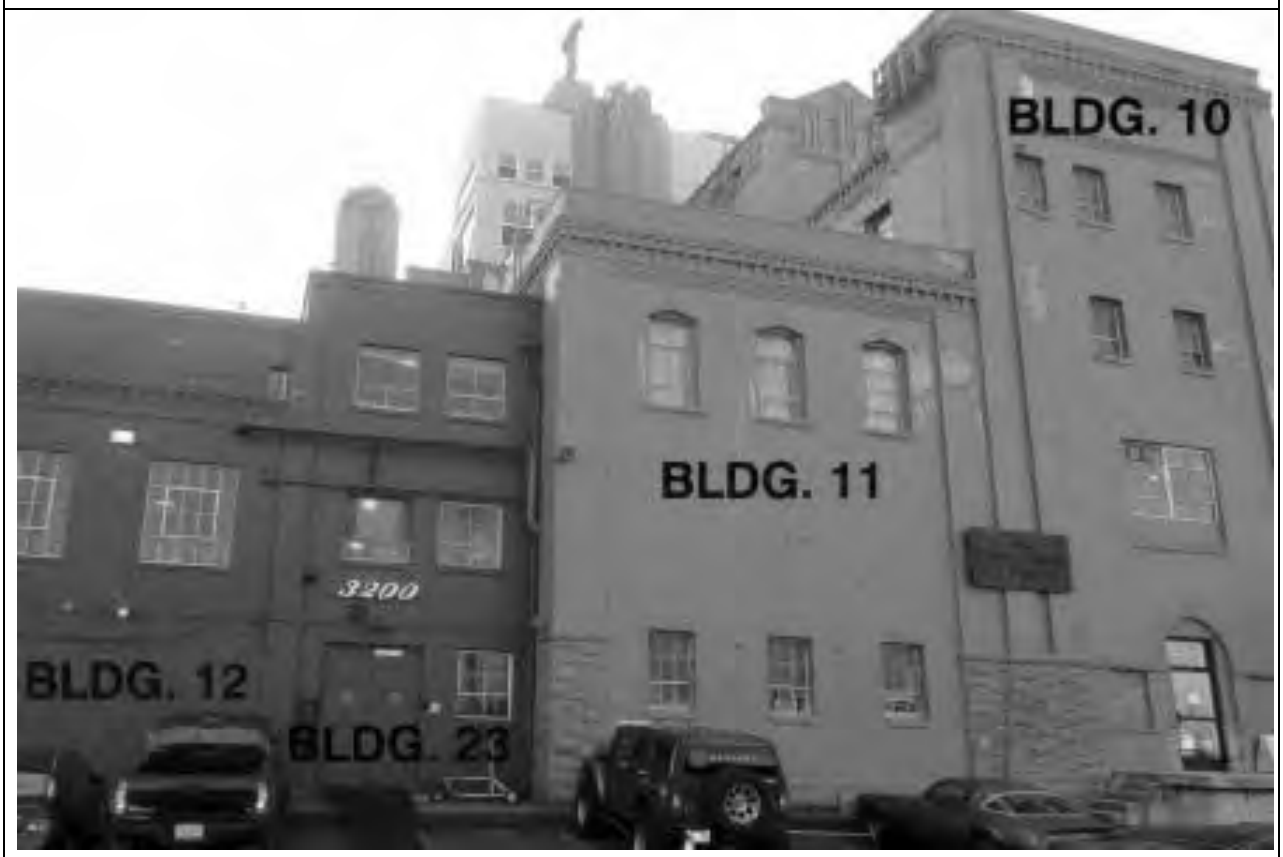
Sample Volume Requirements:

Per the analytical procedure requirements, a minimum of 10 grams of material must be collected.

Reporting

A written report will be provided by NVL to Rainier Commons to provide to the EPA within 30 days of sample collection and analysis. The report will include a description of the sampling locations as well as site photos. The results of the laboratory analysis will be shown in a data table. Any sample with a detection result above 1 ppm will be shown in bold in the table. Laboratory analysis reports and a site map showing sample collection locations will also be included as attachments to the report.

1- **Buildings 10 & 11** West Elevation



2 - **Building 11** West Elevation

3 - Building 13 North Elevation

4 Building 13 South and East Elevations

5 Building 13 West Elevation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ATTACHMENT 2

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www.NVLLABS.com

June 24, 2015

Shimon Mizrahi
Rainier Commons LLC
918 S. Horton Street, Suite 1018
Seattle, WA 98134

Subject: Polychlorinated Biphenyl (PCB) Substrate Sampling
IPWP1 Close Out
Rainier Commons, LLC

Site Address: 3100 Airport Way S, Seattle, WA

NVL Project#: 2012-494

Dear Mr. Mizrahi:

Rainier Commons, LLC retained NVL Laboratories to conduct the sampling at their Old Rainier Brewery site located at 3100 Airport Way South, Seattle, Washington and this letter has been prepared to convey the results.

This report compiles the results of the PCB bulk material samples collected from the concrete and sandstone substrate materials on buildings 10, 11, and 13 pursuant to Condition 8 of the EPA's Risk Based Work Plan Approval for Rainier Commons.

All samples were collected pursuant to NVL's Substrate Sampling Plan (Exhibit 8 to Phase I IPWP) and all sampling protocols and procedures referenced therein.

NVL Labs conducted sampling pursuant to IPWP1 close out on five separate dates between December 1st, 2014, and January 30th, 2015, at the request of Rainier Commons LLC. Samples were collected from the concrete and sandstone substrate materials on the buildings to test for the presence of residual PCB's following work to remove PCB-containing paint coatings from the building.

Initial samples were collected prior to final clearance and approval of all work areas and prior to all "punchlist" work being performed. While these samples are not valid clearance samples the results are reported here as early, pre-clearance sample results, for information purposes only.

Sample results are compared against the substrate screening limit of 1ppm.

The below tables present the results of the substrate sampling.

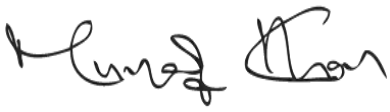
Pre-Clearance Sampling				
Sampling Date	**Sample Number**	**Sampling Location**	**Substrate Type**	**Sample Results (PPM)**
8/4/14	8414MK-1	Building 13 West Elevation	Concrete	2.5
8/4/14	8414MK-2	Building 13 West Elevation	Concrete	2.5
8/4/14	8414MK-3	Building 13 South Elevation	Concrete	1.3
8/4/14	8414MK-4	Building 13 East Elevation	Concrete	ND
9/29/14	Bldg- 11West	Building 11 West Elevation	Concrete	2.9
9/29/14	Bldg- 13North	Building 13 North Elevation	Concrete	ND
10/9/14	10914-BULK-2	Building 10 West Elevation	Sandstone	4.3
ND = Non-Detect PPM = Parts per million or milligrams per kilogram (mg/kg)				

Post-Clearance Compliance Sampling				
Sampling Date	**Sample Number**	**Sampling Location**	**Substrate Type**	**Sample Results (PPM)**
12/1/14	12114-PCB-1	Bldg 11 West Elevation	Sandstone	1.1
12/1/14	12114-PCB-2	Building 13 North Elevation	Concrete	ND
1/30/15	13015-MG-N	Building 13 North Elevation	Concrete	<1
1/30/15	13015-MG-S	Building 13 South Elevation	Concrete	<0.99
1/30/15	13015-MG-E	Building 13 East Elevation	Concrete	<0.97
1/30/15	13015-MG-W	Building 13 West Elevation	Concrete	1.6
ND = Non-Detect PPM = Parts per million or milligrams per kilogram (mg/kg)				

Prepared By

Marcus Gladden
Industrial Hygienist
NVL Laboratories

Reviewed By



Munaf Khan
Project Manager
Laboratory Director / President

Attachments:
Laboratory Testing Reports, NVL Labs Batch No.
1501799
1421389
1418022
1417235
1413963

February 3, 2015

Mr. Munaf Khan

NVL Field Services Division
4708 Aurora Ave. N.
Seattle, 98103

Re: **NVL Batch 1501799.00**

Project Name/Number: 2012-494

Project location: 3100 Airport Way South Seattle, WA 98134

Dear Mr. Khan,

Enclosed please find test results for samples submitted to our laboratory for analysis. Preparation and analysis of these samples were conducted in accordance with published industry standards and methods specified on the attached analytical report.

The content of this package consists of the following:

-Case Narrative & Definition of Data Qualifiers
-Analytical Test Results
-Applicable QC Summary
-Client Chain-of-Custody (CoC)
-NVL Receiving Record

This report package contains a total of 11 pages of analytical test results along with customer COC and other related documents.

The report is considered highly confidential and will not be released without your approval. Samples are archived for two weeks following analysis. Samples that are not retrieved by the client will be discarded after two weeks.

Thank you for using our laboratory services. If you need further assistance, please contact us at 206-547-0100 or 1-888-NVLLABS.

Sincerely,

Nick Ly, Technical Director

Enclosure: Sample Results

Case Narrative:

The following summarizes samples received on date as shown on the accompanied Chain of custody by NVL Laboratories, Inc. from NVL Field Services Division for Project No. 2012-494. Samples were logged in for PCB analysis per client request using both customer sample ID's and laboratory assigned ID's as listed on the Chain-of-Custody (CoC). All samples as received were processed and analyzed within specified turnaround time without any abnormalities and deviations that may affect the analytical results. All quality control requirements were acceptable unless stated otherwise. The conditions of all samples were acceptable at time of receipt and all samples submitted with this batch were analyzed unless stated otherwise on the CoC.

Test Results are reported based on milligram per kilogram (mg/kg) for PCB samples as shown on the analytical reports.

Definition Appendix

Terms

% Rec	Percent recovery.
<	Below Reporting Limit(RL) or Limit of Quantitation(LoQ) of the instrument.
B	Blank contamination. The recorded results is associated with a contaminated blank.
DF	Dilution Factor
J	The reported concentration is an estimated value because something may be present in the sample that interfered with the analysis.
J1	The reported concentration is an estimated value because the laboratory control sample (LCS) is out of control limits.
J2	The reported concentration is an estimated value because the percent recovery for matrix spike is out of control limits.
J3	The reported concentration is an estimated value because the relative percent difference(RPD) for duplicate analysis is out of control limits.
J4	Percent recovery is outside of established control limits.
LCS	Laboratory Control Sample.
Limits	The upper and lower control limits for spike recoveries.
LOQ	Limit of quantitation(same as RL)
mg/kg	Milligrams per kilogram.
ND	Analyte not detected or below the reporting limit of the instrument or methodology
PPM	Parts per Million.
QC Batch Group	Quality Control Batch Group. The entity that links analytical results and supporting quality control results.

Definition Appendix

Terms

R	The data are not reliable due to possible contamination or loss of material during preparation or analysis. Re-sampling and reanalysis are necessary for verification.
RL	Reporting Limit. The minimum concentration that can be quantified under routine operating conditions.
RPD	Relative Percent Difference. The relative difference between duplicate results(matrix spike, blank spike, or samples duplicate) expressed as a percentage.
RPD Limit	The maximum RPD allowed for a set of duplicate measurements(see RPD).
SMI	Surrogate has matrix interference.
Spike Conc.	The measured concentration, in sample basis units, of a spiked sample.
SURR-ND	Surrogate was not detected due to matrix interference or dilution.
ug/m3	Micrograms per cubic meter.
ug/mL	Micrograms per milliliter
mg/Kg	milligram per kilogram

ORGANICS LABORATORY SERVICES

NVL LABS

Company	NVL Field Services Division	**NVL Batch Number**	**1501799.00**
Address	4708 Aurora Ave. N. Seattle, WA 98103	**TAT** 5 Days **Rush TAT**	**AH** No
Project Manager	Mr. Marcus Gladden	**Due Date** 2/6/2015	**Time** 1:45 PM
Phone	(206) 547-0100	**Email**	marcus.g@nvllabs.com
cell	(206) 981-9421 3	**Fax**	(206) 634-1936

Project Name/Number: 2012-494 **Project Location:** 3100 Airport Way S. Seattle, WA 98134

Subcategory Quantitative analysis

Item Code ORG-05 8082 PCB Aroclors <Bulk>

Total Number of Samples 4 Rush Samples

	Lab ID	Sample ID	Description	A/R
1	15010069	13015-MG-N		A
2	15010070	13015-MG-S		A
3	15010071	13015-MG-E		A
4	15010072	13015-MG-W		A

	Print Name	Signature	Company	Date	Time
Sampled by	Client				
Relinquished by	Client				

Office Use Only	Print Name	Signature	Company	Date	Time
Received by	Fatima Khan		NVL	1/30/15	1345
Analyzed by	Evelyn Ahnlm	Ahnlm	NVL	2/2/15	14:58
Results Called by					
☐ **Faxed** ☐ **Emailed**					

Special Instructions:

Entered By: Fatima Khan Date: 1/30/2015 Time: 2:39 PM 1 of 1

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ANALYSIS REPORT

Polychlorinated Biphenyls by Gas Chromatography

Client	**NVL Field Services Division**	Samples Received*	**4**
SDG Number	**1501799.00**	Analyzed By	**Evelyn Ahulu**
Date Reported	**02/03/2015**	Samples Analyzed*	**4**
Project Number	**2012-494**	Analysis Method	**8082A**
Location	**3100 Airport Way South Seattle, WA 98134**	Preparation Method	**3546PR (PCB)**
		* for this test only	

Sample Number	**13015-MG-N**	Received	01/30/2015
Lab Sample ID	15010069	Matrix	Material
Initial Sample Size	2.0083 gm	Units of Result	mg/Kg, as received

Analyte	RL	Final Result	Analysis Date
Aroclor-1016	1.0	< 1.0	02/02/2015
Aroclor-1221	1.0	< 1.0	02/02/2015
Aroclor-1232	1.0	< 1.0	02/02/2015
Aroclor-1242	1.0	< 1.0	02/02/2015
Aroclor-1248	1.0	< 1.0	02/02/2015
Aroclor-1254	1.0	< 1.0	02/02/2015
Aroclor-1260	1.0	< 1.0	02/02/2015
PCBs, Total	**1.0**	**<1**	

Comments: Building 13 North Concrete

Sample Number	**13015-MG-S**	Received	01/30/2015
Lab Sample ID	15010070	Matrix	Material
Initial Sample Size	2.0194 gm	Units of Result	mg/Kg, as received

Analyte	RL	Final Result	Analysis Date
Aroclor-1016	0.99	< 0.99	02/02/2015
Aroclor-1221	0.99	< 0.99	02/02/2015
Aroclor-1232	0.99	< 0.99	02/02/2015
Aroclor-1242	0.99	< 0.99	02/02/2015
Aroclor-1248	0.99	< 0.99	02/02/2015
Aroclor-1254	0.99	< 0.99	02/02/2015
Aroclor-1260	0.99	< 0.99	02/02/2015
PCBs, Total	**0.99**	**<0.99**	

Comments: Building 13 South Concrete

ANALYSIS REPORT

Polychlorinated Biphenyls by Gas Chromatography

Sample Number	**13015-MG-E**	Received	01/30/2015
Lab Sample ID	15010071	Matrix	Material
Initial Sample Size	2.0587 gm	Units of Result	mg/Kg, as received

Analyte	RL	Final Result	Analysis Date
Aroclor-1016	0.97	< 0.97	02/02/2015
Aroclor-1221	0.97	< 0.97	02/02/2015
Aroclor-1232	0.97	< 0.97	02/02/2015
Aroclor-1242	0.97	< 0.97	02/02/2015
Aroclor-1248	0.97	< 0.97	02/02/2015
Aroclor-1254	0.97	< 0.97	02/02/2015
Aroclor-1260	0.97	< 0.97	02/02/2015
PCBs, Total	**0.97**	**<0.97**	

Comments: Building 13 East Concrete

Sample Number	**13015-MG-W**	Received	01/30/2015
Lab Sample ID	15010072	Matrix	Material
Initial Sample Size	2.0293 gm	Units of Result	mg/Kg, as received

Analyte	RL	Final Result	Analysis Date
Aroclor-1016	0.99	< 0.99	02/02/2015
Aroclor-1221	0.99	< 0.99	02/02/2015
Aroclor-1232	0.99	< 0.99	02/02/2015
Aroclor-1242	0.99	< 0.99	02/02/2015
Aroclor-1248	0.99	< 0.99	02/02/2015
Aroclor-1254	0.99	1.6	02/02/2015
Aroclor-1260	0.99	< 0.99	02/02/2015
PCBs, Total	**0.99**	**1.6**	

Comments: Building 13 West Concrete

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NVL Laboratories, Inc.
4708 Aurora Ave. N.
Seattle, WA 98103

Phone: 206 547-0100
Fax: 206 634-1936

Quality Control Results

Project Number:	**2012-494**	**SDG Number:**	**1501799**
		Project Manager:	**Munaf Khan**
QC Batch(es):	**Q251**	Analysis Method:	**8082A**
QC Batch Method:	3546PR (PCB)	Analysis Description:	Polychlorinated Biphenyls by Gas Chromatography
Preparation Date:	02/02/2015		

Blank: MB-1501799

Analyte	Blank Result	Units	DF	RL	Control Limit	Qualifiers
Aroclor-1016	ND	mg/Kg	1	1.0	1	
Aroclor-1221	ND	mg/Kg	1	1.0	1	
Aroclor-1232	ND	mg/Kg	1	1.0	1	
Aroclor-1242	ND	mg/Kg	1	1.0	1	
Aroclor-1248	ND	mg/Kg	1	1.0	1	
Aroclor-1254	ND	mg/Kg	1	1.0	1	
Aroclor-1260	ND	mg/Kg	1	1.0	1	
PCBs, Total	ND	mg/Kg	1	1.0	1	
Surrogates:				% Rec		
Tetrachloro-m-xylene			1	83	40-140	
Decachlorobiphenyl			1	97	40-140	

Lab Control Sample: MSPK-1501799

Analyte	Blank Spike Result	Units	DF	Spike Conc.	% Rec	% Rec Limits	Qualifiers
Aroclor-1254	20.1	mg/Kg	1	20.0	101	40-140	
Surrogates:							
Tetrachloro-m-xylene			1		77	40-140	
Decachlorobiphenyl			1		103	40-140	

Lab Control Sample: LCS-1501799
Lab Control Sample Duplicate: LCS Dup-1501799

Analyte	Blank Spike Result	Units	DF	Spike Conc.	% Rec	Limits	RPD	RPD Limit	Qualifiers
Aroclor-1016	14.2	mg/Kg	1	20.0	71	40-140			
	12.5			20.0	63	40-140	13	50	
Aroclor-1260	16.5	mg/Kg	1	20.0	83	40-140			
	18.2			20.0	91	40-140	10	50	
Surrogates:									
Tetrachloro-m-xylene			1		81	40-140			
					83	40-140			
Decachlorobiphenyl			1		104	40-140			
					87	40-140			

NVL Laboratories, Inc.

Surrogate Recovery Summary Report

Client NVL Field Services Division **SDG Number** 1501799

Project 2012-494

Customer Sample ID	Lab Sample ID	Analyte	Recovery	Limits
13015-MG-N	15010069	Decachlorobiphenyl	98%	40-140
13015-MG-N	15010069	Tetrachloro-m-xylene	68%	40-140
13015-MG-S	15010070	Decachlorobiphenyl	95%	40-140
13015-MG-S	15010070	Tetrachloro-m-xylene	72%	40-140
13015-MG-E	15010071	Decachlorobiphenyl	96%	40-140
13015-MG-E	15010071	Tetrachloro-m-xylene	87%	40-140
13015-MG-W	15010072	Decachlorobiphenyl	96%	40-140
13015-MG-W	15010072	Tetrachloro-m-xylene	86%	40-140
LCS Dup-1501799	LCS Dup-1501799	Decachlorobiphenyl	87%	40-140
LCS Dup-1501799	LCS Dup-1501799	Tetrachloro-m-xylene	83%	40-140
LCS-1501799	LCS-1501799	Decachlorobiphenyl	104%	40-140
LCS-1501799	LCS-1501799	Tetrachloro-m-xylene	81%	40-140
MB-1501799	MB-1501799	Decachlorobiphenyl	97%	40-140
MB-1501799	MB-1501799	Tetrachloro-m-xylene	83%	40-140
MSPK-1501799	MSPK-1501799	Decachlorobiphenyl	103%	40-140
MSPK-1501799	MSPK-1501799	Tetrachloro-m-xylene	77%	40-140

* Recovery outside limits

NVL Laboratories, Inc.

INITIAL AND CONTINUING CALIBRATION VERIFICATION

SDG No: **1501799** Contract: **N/A**

Determination: **8082 PCB Aroclors <Material>**

Run	Sample	Source	Analyzed	Analyte	True	Found	Unit	% Rec	Limits
R000244	CCV1 1016 -1260	PCB_2014-1-17	02/02/2015	Aroclor-1016	5	5	ug/mL	100	80-120
		PCB_2014-1-17	02/02/2015	Aroclor-1260	5	5	ug/mL	100	80-120
	CCV1 1254	PCB_2014-1-18	02/02/2015	Aroclor-1254	5	5	ug/mL	100	80-120
	ICV 1016-1260	PCB_2014-2-4	02/02/2015	Aroclor-1016	5	4.94	ug/mL	99	85-115
		PCB_2014-2-4	02/02/2015	Aroclor-1260	5	5.614	ug/mL	112	85-115
	CCV2 1016 - 1260	PCB_2014-1-17	02/02/2015	Aroclor-1016	5	4.743	ug/mL	95	80-120
		PCB_2014-1-17	02/02/2015	Aroclor-1260	5	4.695	ug/mL	94	80-120
	CCV2-1254	PCB_2014-1-18	02/02/2015	Aroclor-1254	5	4.959	ug/mL	99	80-120

% Rec = Percent recovery

* = Percent recovery not within control limits

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CHAIN of CUSTODY SAMPLE LOG

1501799

Client: NVL Laboratories Inc
Street: 4708 Aurora Ave N
Seattle, WA 98103
Project Manager: Munaf Khan
Project Location: 3100 Airport Way South
Seattle, WA 98134

NVL Batch Number:
Client Job Number: 2012-494
Total Samples: 4
Turn Around Time: ☐ 1 Hr ☐ 6 Hrs ☐ 3 Days ☐ 10 Days ☐ 2 Hrs ☐ 1 Day ☐ 4 Days ☐ 4 Hrs ☐ 2 Days ☒ 5 Days
Please call for TAT less than 24 Hrs
Email address:

Phone: (206) 447-0263 Fax: (206) 447-0299

☐ Asbestos Air	☐ PCM (NIOSH 7400)	☐ TEM (NIOSH 7402)	☐ TEM (AHERA)	☐ TEM (EPA Level II)	☐ Other
☐ Asbestos Bulk	☐ PLM (EPA/600/R-93/116)	☐ PLM (EPA Point Count)	☐ PLM (EPA Gravimetry)	☐ TEM BULK	
☐ Mold/Fungus	☐ Mold Air	☐ Mold Bulk	☐ Rotometer Calibration		

METALS	Det. Limit	Matrix		RCRA Metals		Other Metals
☐ Total Metals	☐ FAA (ppm)	☐ Air Filter	☐ Soil	☐ Arsenic (As)	☐ All 8	☐ All 3
☐ TCLP	☐ ICP (ppm)	☐ Drinking water	☐ Paint Chips in %	☐ Barium (Ba)	☐ Chromium (Cr	☐ Copper (Cu)
☐ Cr 6	☐ GFAA (ppb)	☐ Dust/wipe (Area)	☐ Paint Chips in cm	☐ Cadmium (Cd)	☐ Lead (Pb)	☐ Nickel (Ni)
					☐ Mercury (Hg)	☐ Zinc (Zn)

☒ Other Types of Analysis: ☐ Fiberglass ☐ Nuisance Dust ☒ Other (Specify) PCB's, Bulk, EPA 8082
☐ Silica ☐ Respirable Dust

Condition of Package: ☐ Good ☐ Damaged (no spillage) ☐ Severe damage (spillage)

Seq. #	Lab ID	Client Sample Number	Comments	A/R
1		13015-MG-N	BUILDING 13 NORTH CONCRETE	
2		13015-MG-S	BUILDING 13 SOUTH CONCRETE	
3		E	BUILDING 13 EAST CONCRETE	
4		W	BUILDING 13 WEST CONCRETE	
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				

	Print Below	Sign Below	Company	Date	Time
Sampled by	Marcus Gordon		NVL Labs	1-30-15	11:00
Relinquished by	Munaf Khan				13:45
Received by			NVL Labs	1/30/15	1:45
Analyzed by	Evelyn Ahnlund		NVL	2/2/15	14:58
Results Called by					
Results Faxed by					

Special Instructions: Unless requested in writing, all samples will be disposed of two (2) weeks after analysis.
Results report to

ANALYSIS REPORT

Polychlorinated Biphenyls by Gas Chromatography

Client	**NVL Field Services Division**	Samples Received*	**2**
SDG Number	**1421389.00**	Analyzed By	**Evelyn Ahulu**
Date Reported	**12/08/2014**	Samples Analyzed*	**2**
Project Number	**2012-494**	Analysis Method	**8082A**
Location	**3100 Airport Way South, Seattle, WA 98134**	Preparation Method	**3546PR (PCB)**
		* for this test only	

Sample Number	**12114-PCB-1**	Received	12/01/2014
Lab Sample ID	14145438	Matrix	Material
Initial Sample Size	2.0219 gm	Units of Result	mg/Kg, as received

Analyte	RL	Final Result	Analysis Date
Aroclor-1016	0.99	< 0.99	12/04/2014
Aroclor-1221	0.99	< 0.99	12/04/2014
Aroclor-1232	0.99	< 0.99	12/04/2014
Aroclor-1242	0.99	< 0.99	12/04/2014
Aroclor-1248	0.99	< 0.99	12/04/2014
Aroclor-1254	0.99	1.1	12/04/2014
Aroclor-1260	0.99	< 0.99	12/04/2014
PCBs, Total	**0.99**	**1.1**	

Comments: Bldg. 11 W. Sandstone

Sample Number	**12114-PCB-2**	Received	12/01/2014
Lab Sample ID	14145439	Matrix	Material
Initial Sample Size	2.0009 gm	Units of Result	mg/Kg, as received

Analyte	RL	Final Result	Analysis Date
Aroclor-1016	1.0	< 1.0	12/04/2014
Aroclor-1221	1.0	< 1.0	12/04/2014
Aroclor-1232	1.0	< 1.0	12/04/2014
Aroclor-1242	1.0	< 1.0	12/04/2014
Aroclor-1248	1.0	< 1.0	12/04/2014
Aroclor-1254	1.0	< 1.0	12/04/2014
Aroclor-1260	1.0	< 1.0	12/04/2014
PCBs, Total	**1.0**	**<1**	

Comments: Bldg. 13 N. Concrete

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CHAIN of CUSTODY SAMPLE LOG

1421389

Client NVL Laboratories Inc
Street 4708 Aurora Ave N
Seattle, WA 98103
Project Manager Munaf Khan
Project Location 3100 Airport Way South
Seattle, WA 98134

NVL Batch Number
Client Job Number 2012-494
Total Samples 2
Turn Around Time ☐ 1 Hr ☐ 6 Hrs ☐ 3 Days ☐ 10 Days ☐ 2 Hrs ☐ 1 Day ☐ 4 Days ☐ 4 Hrs ☐ 2 Days ☒ 5 Days
Please call for TAT less than 24 Hrs
Email address

Phone: (206) 447-0263 **Fax:** (206) 447-0299

☐ Asbestos Air	☐ PCM (NIOSH 7400)	☐ TEM (NIOSH 7402)	☐ TEM (AHERA)	☐ TEM (EPA Level II)	☐ Other
☐ Asbestos Bulk	☐ PLM (EPA/600/R-93/116)	☐ PLM (EPA Point Count)	☐ PLM (EPA Gravimetry)	☐ TEM BULK	
☐ Mold/Fungus	☐ Mold Air	☐ Mold Bulk	☐ Rotometer Calibration		

METALS	Det. Limit	Matrix		RCRA Metals		Other Metals
☐ Total Metals	☐ FAA (ppm)	☐ Air Filter	☐ Soil	☐ Arsenic (As)	☐ All 8	☐ All 3
☐ TCLP	☐ ICP (ppm)	☐ Drinking water	☐ Paint Chips in %	☐ Barium (Ba)	☐ Chromium (Cr	☐ Copper (Cu)
☐ Cr 6	☐ GFAA (ppb)	☐ Dust/wipe (Area)	☐ Paint Chips in cm	☐ Cadmium (Cd)	☐ Lead (Pb)	☐ Nickel (Ni)
					☐ Mercury (Hg)	☐ Zinc (Zn)

☒ **Other Types of Analysis** ☐ Fiberglass ☐ Nuisance Dust ☒ Other (Specify) PCB's - Bulk - EPA 8082 ☐ Silica ☐ Respirable Dust

Condition of Package: ☐ Good ☐ Damaged (no spillage) ☐ Severe damage (spillage)

Seq. #	Lab ID	Client Sample Number	Comments	A/R
1		12114-PCB-1	BLDG 11 W. SANDSTONE	
2		12114-PCB-2	BLDG 13 N. CONCRETE	
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				

	Print Below	Sign Below	Company	Date	Time
Sampled by	Marcus Gaudio		NVL LABS	12/1/14	13:00
Relinquished by					16:00
Received by				12/1/14	1600
Analyzed by					
Results Called by					
Results Faxed by					

Special Instructions: Unless requested in writing, all samples will be disposed of two (2) weeks after analysis.
Results report to

NVL Laboratories, Inc.
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p 206.547.0100 | f 206.634.1936 | www.nvllabs.com

Analysis Report
Polychlorinated Biphenyls (PCBs)

NVL LABS INDUSTRIAL HYGIENE SERVICES

Client: NVL Field Services Division
Address: 4708 Aurora Ave. N.
Seattle, WA 98103

Attention: Mr. Marcus Gladden
Project Location: 3100 Airport Way South Seattle,WA 98134

NVL Batch #: 1418022.00
Method No.: EPA 8082
Client Project #: 2012-494
Date Received: 10/9/2014
Matrix: Bulk
Samples Received: 2
Samples Analyzed: 2

Lab Sample ID:	14128826	14128827		
Client Sample ID:	10914-BULK-1	10914-BULK-2		
Sample Description:	Blue Paint, Bldg. 13 SW	Sandstone, Bldg. 10 W		
Sample Weight (g)	1.0403	2.0156		
PCB Type	mg/Kg(ppm)	mg/Kg(ppm)		
Aroclor 1016	ND	ND		
Aroclor 1221	ND	ND		
Aroclor 1232	ND	ND		
Aroclor 1242	ND	ND		
Aroclor 1248	ND	ND		
Aroclor 1254	100.00	2.8		
Aroclor 1260	29.00	1.5		
Total: PCB Concentration	129.0	4.3		
Reporting Limit (RL)	19.0	1.0		

Remarks: mg/Kg = Milligrams per kilogram
ppm = Parts per million by weight
ND = None Detected (less than RL)
<RL = Below the reporting limit of instrument

Sampled by: Client
Analyzed by: Shalini Patel **Date:** 10/10/2014
Reviewed by: Nick Ly **Date:** 10/10/2014

Nick Ly, Technical Director

RCLLC 0006820

NVL Laboratories, Inc.
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CHAIN of CUSTODY SAMPLE LOG

1418022

Client NVL Laboratories Inc
Street 4708 Aurora Ave N
Seattle, WA 98103
Project Manager Munaf Khan
Project Location 3100 Airport Way South
Seattle, WA 98134

NVL Batch Number
Client Job Number 2012-494
Total Samples 2
Turn Around Time ☐ 1 Hr ☐ 6 Hrs ☐ 3 ☐ 10 ☐ 2 Hrs ☒ 1 ☐ 4 ☐ 4 Hrs ☐ 2 ☐ 5
Please call for TAT less than 24 Hrs
Email address

Phone: (206) 447-0263 **Fax:** (206) 447-0299

☐ **Asbestos Air**	☐ PCM (NIOSH 7400)	☐ TEM (NIOSH 7402)	☐ TEM (AHERA)	☐ TEM (EPA Level II)	☐ Other
☐ **Asbestos Bulk**	☐ PLM (EPA/600/R-93/116)	☐ PLM (EPA Point Count)	☐ PLM (EPA Gravimetry)	☐ TEM BULK	
☐ **Mold/Fungus**	☐ Mold Air	☐ Mold Bulk	☐ **Rotometer Calibration**		

METALS	**Det. Limit**	**Matrix**		**RCRA Metals**		**Other Metals**
☐ Total Metals	☐ FAA (ppm)	☐ Air Filter	☐ Soil	☐ Arsenic (As)	☐ All 8 / ☐ Chromium (C	☐ **All 3** / ☐ Copper (Cu)
☐ TCLP	☐ ICP (ppm)	☐ Drinking water	☐ Paint Chips in %	☐ Barium (Ba)	☐ Lead (Pb)	☐ Nickel (Ni)
☐ Cr 6	☐ GFAA (ppb)	☐ Dust/wipe (Area)	☐ Paint Chips in cr	☐ Cadmium (Cd)	☐ Mercury (Hg)	☐ Zinc (Zn)

☒ **Other Types of Analysis** ☐ Fiberglass ☐ Nuisance Dust ☒ Other (Specify) PCB's - Bulk
☐ Silica ☐ Respirable Dust

Condition of Package: ☐ Good ☐ Damaged (no spillage) ☐ Severe damage (spillage)

Seq. #	Lab ID	Client Sample Number	Comments	A/R
1		10914-Bulk-1	BLUE PAINT, BLDG 13 SW	
2		↓ 2	SANDSTONE, BLDG 10 W	
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				

	Print Below	Sign Below	Company	Date	Time
Sampled by	MARCUS GLADDEN		NVL LABS	10/9/14	11:30
Relinquished by	↓	↓	↓	↓	14:15
Received by	Midori Kato		NVL	10/9/14	1415
Analyzed by					
Results Called by					
Results Faxed by					

Special Instructions: Unless requested in writing, all samples will be disposed of two (2) weeks after analysis.
Results report to

NVL Laboratories, Inc.
4708 Aurora Ave N, Seattle, WA 98103
p 206.547.0100 | f 206.634.1936 | www.nvllabs.com

Analysis Report
Polychlorinated Biphenyls (PCBs)

NVL LABS INDUSTRIAL HYGIENE SERVICES

Client: NVL Field Services Division
Address: 4708 Aurora Ave. N.
Seattle, WA 98103

Attention: Mr. Munaf Khan
Project Location: 3100 Airport Way South. Seattle, WA 98134

NVL Batch No. 1417235
Method No.: EPA 8082
Client Project #: 2012-494
Date Received: 9/29/2014
Matrix: Bulk
Samples Received: 2
Samples Analyzed: 2

Lab Sample ID:	14125190	14125191		
Client Sample ID:	Bldg-11 West	Bldg-13 North		
Sample Description:	West Wall Concrete	North Wall Concrete		
Sample Weight (g)	2.2160	2.0110		
PCB Type	mg/Kg(ppm)	mg/Kg(ppm)		
Aroclor 1016	ND	ND		
Aroclor 1221	ND	ND		
Aroclor 1232	ND	ND		
Aroclor 1242	ND	ND		
Aroclor 1248	ND	ND		
Aroclor 1254	1.9	ND		
Aroclor 1260	1	ND		
Total: PCB Concentration	2.9	ND		
Reporting Limit (RL)	0.9	1.0		

Remarks: mg/Kg = Milligrams per kilograms
ppm = Parts per million by weight

ND = None Detected (less than RL)
<RL = Below the reporting limit of instrument

Sampled by: Client
Analyzed by: Evelyn Ahulu **Date:** 10/01/2014
Reviewed by: Nick Ly **Date:** 10/02/2014

Nick Ly, Technical Director

NVL Laboratories, Inc.
4708 Aurora Ave N, Seattle, WA 98103
Tel: 206.547.0100 Emerg. Cell: 206.914.4646
1.888.NVL.LABS (685.5227) www.nvllabs.com

CHAIN of CUSTODY SAMPLE LOG

1417235

Client NVL Laboratories Inc
Street 4708 Aurora Ave N
Seattle, WA 98103
Project Manager Munaf Khan
Project Location 3100 Airport Way South
Seattle, WA 98134

NVL Batch Number
Client Job Number 2012-494
Total Samples 2
Turn Around Time ☐ 1 Hr ☐ 6 Hrs ☒ 3 ☐ 10 ☐ 2 Hrs ☐ 1 ☐ 4 ☐ 4 Hrs ☐ 2 ☐ 5
Please call for TAT less than 24 Hrs
Email address

Phone: (206) 447-0263 **Fax:** (206) 447-0299

☐ Asbestos Air	☐ PCM (NIOSH 7400)	☐ TEM (NIOSH 7402)	☐ TEM (AHERA)	☐ TEM (EPA Level II)	☐ Other
☐ Asbestos Bulk	☐ PLM (EPA/600/R-93/116)	☐ PLM (EPA Point Count)	☐ PLM (EPA Gravimetry)	☐ TEM BULK	
☐ Mold/Fungus	☐ Mold Air	☐ Mold Bulk	☐ Rotometer Calibration		

METALS	Det. Limit	Matrix		RCRA Metals		Other Metals
☐ Total Metals	☐ FAA (ppm)	☐ Air Filter	☐ Soil	☐ Aluminum (AL)	☐ Beryllium (Be	☐ All 3
☐ TCLP	☐ ICP (ppm)	☐ Drinking water	☐ Paint Chips in %	☐ Arsenic (As)	☐ Bismuth (Bi)	☐ Copper (Cu)
☐ Cr 6	☐ GFAA (ppb)	☐ Dust/wipe (Area)	☐ Paint Chips in cr	☐ Barium (Ba)	☐ Boron (B)	☐ Nickel (Ni)
				☐ All 8		☐ Zinc (Zn)

☐ Other Types of Analysis	☐ Fiberglass ☐ Silica	☐ Nuisance Dust ☐ Respirable Dust	☒ Other (Specify)	Organics Bulk

Condition of Package: ☐ Good ☐ Damaged (no spillage) ☐ Severe damage (spillage)

Seq. #	Lab ID	Client Sample Number	Comments	A/R
1		Bldg – 11 west	west wall Concrete	
2		Bldg – 13 north	north wall Concrete	
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				

	Print Below	Sign Below	Company	Date	Time
Sampled by	Munaf Khan	Munaf Khan	NVL Labs	9.29.14	
Relinquished by	Munaf Khan	Munaf Khan	↓	9.29.14	11:50am
Received by	Information		NVL Labs	9/29/14	1:15pm
Analyzed by	Evelyn Amaka	Evelyn Amaka	NVL Labs	10/1/14	15:00
Results Called by					
Results Faxed by					

Special Instructions: Unless requested in writing, all samples will be disposed of two (2) weeks after analysis.
Results report to MUNAF

NVL Laboratories, Inc.
4708 Aurora Ave N, Seattle, WA 98103
p 206.547.0100 | f 206.634.1936 | www.nvllabs.com

Analysis Report
Polychlorinated Biphenyls (PCBs)

NVL LABS INDUSTRIAL HYGIENE SERVICES

Client: NVL Field Services Division
Address: 4708 Aurora Ave. N.
Seattle, WA 98103

Attention: Mr. Munaf Khan
Project Location: 3100 Airport Way South Seattle, WA 98134

NVL Batch No. 1413963.00
Method No.: EPA 8082
Client Project #: 2012-494
Date Received: 8/12/2014
Matrix: Bulk
Samples Received: 4
Samples Analyzed: 4

Lab Sample ID:	14108005	14108006	14108007	14108008
Client Sample ID:	8414MK-1	8414MK-2	8414MK-3	8414MK-4
Sample Description:	West side 1	West side 1A	South side	East side
Sample Weight (g)	2.0523	2.0463	2.0108	2.0073
PCB Type	mg/Kg(ppm)	mg/Kg(ppm)	mg/Kg(ppm)	mg/Kg(ppm)
Aroclor 1016	ND	ND	ND	ND
Aroclor 1221	ND	ND	ND	ND
Aroclor 1232	ND	ND	ND	ND
Aroclor 1242	ND	ND	ND	ND
Aroclor 1248	ND	ND	ND	ND
Aroclor 1254	1.5	2.5	1.3	ND
Aroclor 1260	1	ND	ND	ND
Total: PCB Concentration	2.5	2.5	1.3	ND
Reporting Limit (RL)	1.0	1.0	1.0	1.0

Remarks: mg/Kg = Milligrams per kilograms
ppm = Parts per million by weight
ND = None Detected (less than RL)
<RL = Below the reporting limit of instrument

Sampled by: Client
Analyzed by: Evelyn Ahulu **Date:** 08/18/2014
Reviewed by: Nick Ly **Date:** 08/18/2014

Nick Ly, Technical Director

Preparation of these samples were conducted in accordance with EPA Method 3546 or other published test methods as noted in this report. Unless stated otherwise, the condition of all samples was acceptable at time of receipt. Reported sample results are based on dry weight and method QC results are acceptable unless stated otherwise. If samples were not collected by NVL personnel, then the accuracy of the results is limited by the methodology and acuity of the sample collector. This report shall not be reproduced except in full, without written approval of NVL Laboratories, Inc.. Responsibility for interpretation of the reported data rests with the client.

RCLLC 0006824

NVL Laboratories, Inc.
4708 Aurora Ave N, Seattle, WA 98103
Tel: 206.547.0100 Emerg. Cell: 206.914.4646
1.888.NVL.LABS (685.5227) www.nvllabs.com

CHAIN of CUSTODY SAMPLE LOG

NVL Batch ID 1413963

Client: NVL Laboratories Inc
Street: 4708 Aurora Ave N
Seattle, WA 98103
Project Manager: Munaf Khan
Project Location: 3100 Airport Way South
Seattle, WA 98134
Phone: (206) 447-0263 Fax: (206) 447-0299

NVL Batch Number:
Client Job Number: 2012-494
Total Samples: 4
Turn Around Time: ☐ 1-Hr ☐ 2-Hrs ☐ 4-Hrs ☐ 8-Hrs ☐ 12-Hrs ☐ 24-Hrs ☐ 2 ☐ 3 ☐ 4 ☒ 5 ☐ 6-10
Please call for TAT less than 24 Hrs
Email address:

☐ Asbestos Air	☐ PCM (NIOSH 7400)	☐ TEM (NIOSH 7402)	☐ TEM (AHERA)	☐ TEM (EPA Level II)	☐ Other
☐ Asbestos Bulk	☐ PLM (EPA/600/R-93/116)	☐ PLM (EPA Point Count)	☐ PLM (EPA Gravimetry)	☐ TEM BULK	
☐ Mold/Fungus	☐ Mold Air	☐ Mold Bulk	☐ Rotometer Calibration		

METALS	Det. Limit	Matrix		RCRA Metals		Other Metals
☐ Total Metals	☐ FAA (ppm)	☐ Air Filter	☐ Soil	☐ Arsenic (As)	☐ All 8	☐ All 3
☐ TCLP	☐ ICP (ppm)	☐ Drinking water	☐ Paint Chips in %	☐ Barium (Ba)	☐ Chromium (C	☐ Copper (Cu)
☐ Cr 6	☐ GFAA (ppb)	☐ Dust/wipe (Area)	☐ Paint Chips in cr	☐ Cadmium (Cd)	☐ Lead (Pb)	☐ Nickel (Ni)
					☐ Mercury (Hg)	☐ Zinc (Zn)

☐ Other Types of Analysis ☐ Fiberglass ☐ Silica ☐ Nuisance Dust ☐ Respirable Dust ☒ Other (Specify) PCB's

Condition of Package: ☐ Good ☐ Damaged (no spillage) ☐ Severe damage (spillage)

Seq. #	Lab ID	Client Sample Number	Comments	A/R
1		8414MK-1	West side 1	
2		2	" 1A	
3		3	South side	
4		4	East side	
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				

	Print Below	Sign Below	Company	Date	Time
Sampled by	Munaf Khan		NVL LABS	8.4.14	
Relinquished by	Munaf Khan		↓	8.12.14	
Received by	Sc Shearer		NVL	8/12/14	1700
Analyzed by					
Results Called by					
Results Faxed by					

Special Instructions: Unless requested in writing, all samples will be disposed of two (2) weeks after analysis.
Results report to MUNAF

ATTACHMENT 2A

SAMPLING PERFORMED 10-9-2014 DEPICTING THE WEST ELEVATION OF BLDG 10.

SAMPLING PERFORMED 1-30-15 DEPICTING THE NORTH ELEVATION OF BUILDING 13

SAMPLING PERFORMED 1-30-15 DEPICTING THE WEST ELEVATION OF BLDG 13

SEISMIC SAMPLING
PERFORMED 7-17-2018
BUILDING 11 WEST ELEVATION
CONCRETE SUBSTRATE
BOSCH
11235VS

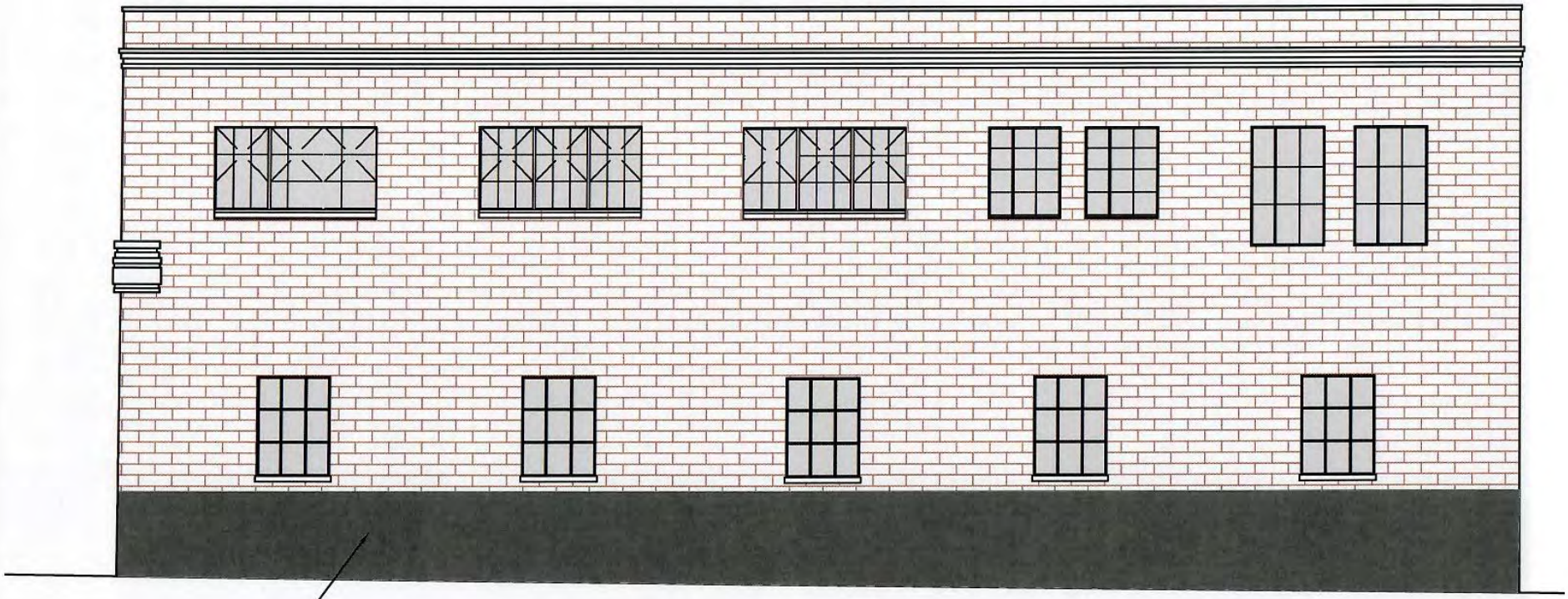
ATTACHMENT 2B

POST-CLEARANCE SUBSTRATE SAMPLE LOCATIONS

SOUTH ELEVATION
BUILDING 13

NORTH ELEVATION
BUILDING 13

POST-CLEARANCE SUBSTRATE SAMPLE LOCATIONS

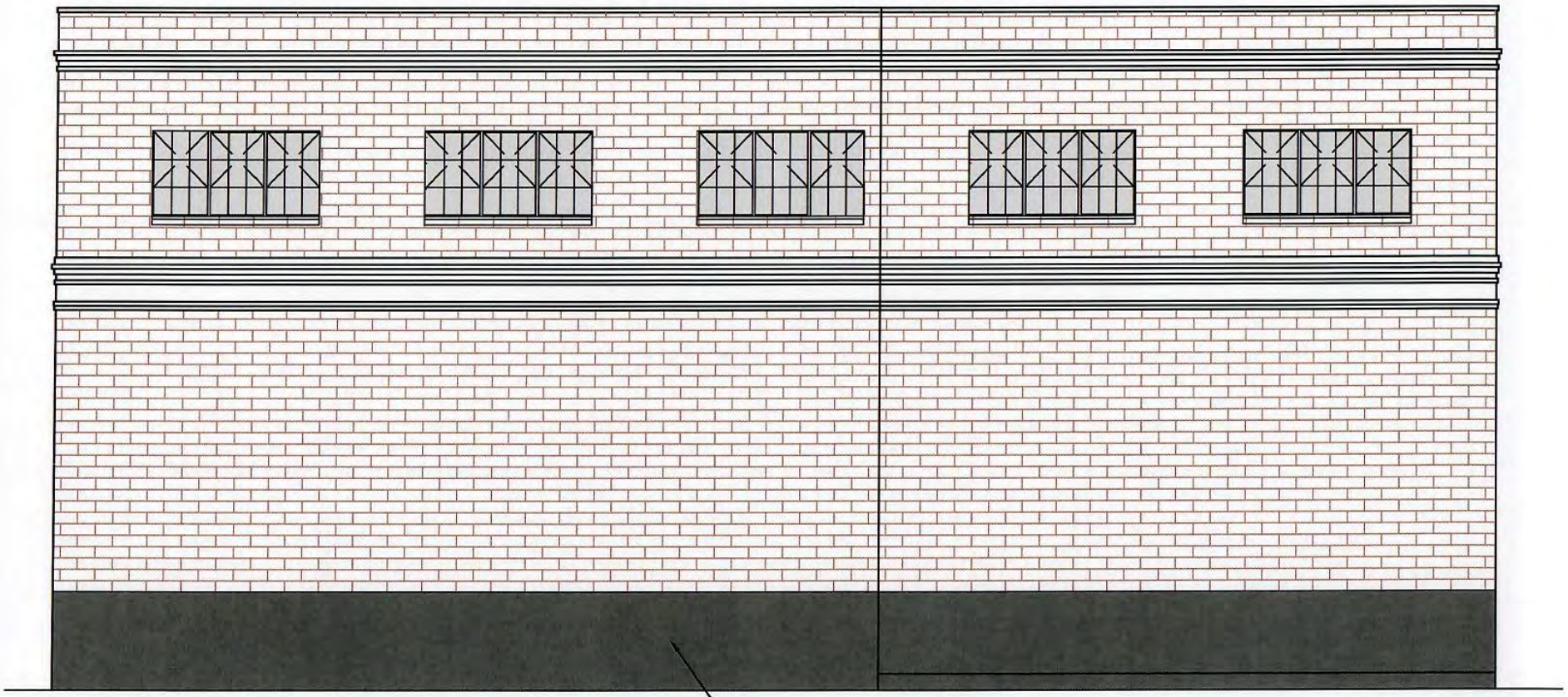


CONCRETE - 1 SAMPLE
(1) 13015-MG-E --- N/D

EAST ELEVATION
BUILDING 13

RCLLC 0006833

POST-CLEARANCE SUBSTRATE SAMPLE LOCATIONS

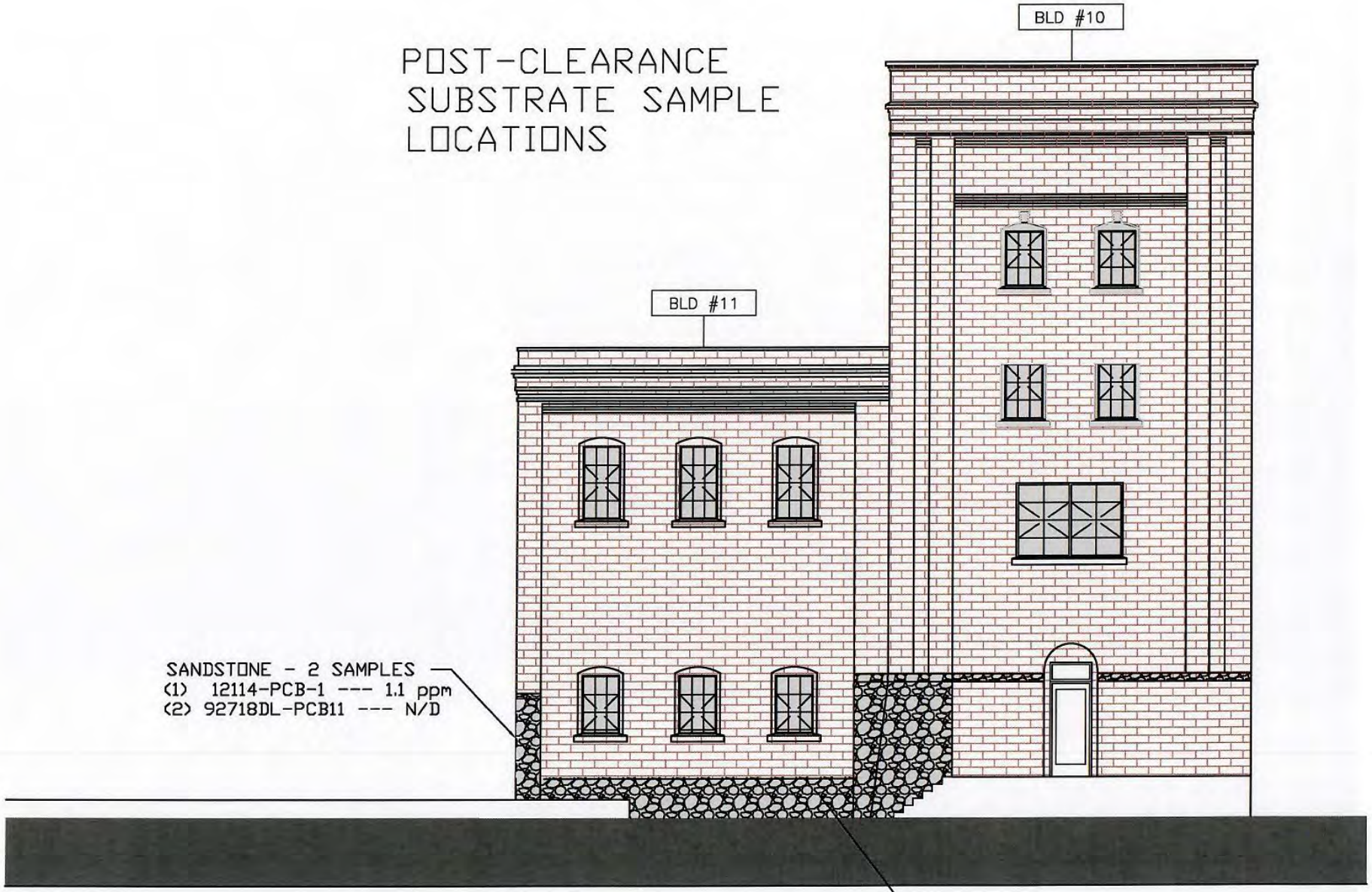


CONCRETE - 2 SAMPLES
(1) 13015-MG-W --- 1.6 ppm
(2) 92718DL-PCB-13 --- N/D

WEST ELEVATION
BUILDING 13

RCLLC 0006834

POST-CLEARANCE SUBSTRATE SAMPLE LOCATIONS



WEST ELEVATION
BUILDINGS 10, 11

RCLLC 0006835

ATTACHMENT 2C

August 18, 2014

Mr. Munaf Khan

NVL Field Services Division
4708 Aurora Ave. N.
Seattle, 98103

Re: **NVL Batch 1413963.00**

Project Name/Number: 2012-494

Project location: 3100 Airport Way South, Seattle, WA 98134

Dear Mr. Khan,

Enclosed please find test results for samples submitted to our laboratory for analysis. Preparation and analysis of these samples were conducted in accordance with published industry standards and methods specified on the attached analytical report.

The content of this package consists of the following:

-Case Narrative & Definition of Data Qualifiers
-Analytical Test Results
-Applicable QC Summary
-Client Chain-of-Custody (CoC)
-NVL Receiving Record

The report is considered highly confidential and will not be released without your approval. Samples are archived for two weeks following analysis. Samples that are not retrieved by the client will be discarded after two weeks.

Thank you for using our laboratory services. If you need further assistance, please contact us at 206-547-0100 or 1-888-NVLLABS.

Sincerely,

Nick Ly, Technical Director

Enclosure: Sample Results

Case Narrative:

The following summarizes samples received on date as shown on the accompanied Chain of custody by NVL Laboratories, Inc. from NVL Field Services Division for Project Number: 2012-494. Samples were logged in for PCB analysis per client request using both customer sample ID's and laboratory assigned ID's as listed on the Chain-of-Custody (CoC). All samples as received were processed and analyzed within specified turnaround time without any abnormalities and deviations that may affect the analytical results. All quality control requirements were acceptable unless stated otherwise. The conditions of all samples were acceptable at time of receipt and all samples submitted with this batch were analyzed unless stated otherwise on the CoC.

Test Results are reported based on dry weight in milligram per kilograms (mg/kg) for PCB samples as shown on the analytical reports.

NVL Laboratories, Inc.
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Definition Appendix

Terms

% Rec	Percent recovery.
<	Below Reporting Limit(RL) or Limit of Quantitation(LoQ) of the instrument.
B	Blank contamination. The recorded results is associated with a contaminated blank.
DF	Dilution Factor
J	The reported concentration is an estimated value because something may be present in the sample that interfered with the analysis.
J1	The reported concentration is an estimated value because the laboratory control sample (LCS) is out of control limits.
J2	The reported concentration is an estimated value because the percent recovery for matrix spike is out of control limits.
J3	The reported concentration is an estimated value because the relative percent difference(RPD) for duplicate analysis is out of control limits.
J4	Percent recovery is outside of established control limits.
LCS	Laboratory Control Sample.
LFS	Laboratory Fortified Spike
Limits	The upper and lower control limits for spike recoveries.
LN	Quality control sample is outside of control limits. This analyte was not detected in the sample.
LOQ	Limit of quantitation(same as RL)
mg/kg	Milligrams per kilogram.
ND	Analyte not detected or below the reporting limit of the instrument or methodology

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Definition Appendix

Terms

PPM	Parts per Million.
QC Batch Group	Quality Control Batch Group. The entity that links analytical results and supporting quality control results.
R	The data are not reliable due to possible contamination or loss of material during preparation or analysis. Re-sampling and reanalysis are necessary for verification.
RL	Reporting Limit. The minimum concentration that can be quantified under routine operating conditions.
RPD	Relative Percent Difference. The relative difference between duplicate results(matrix spike, blank spike, or samples duplicate) expressed as a percentage.
RPD Limit	The maximum RPD allowed for a set of duplicate measurements(see RPD).
SMI	Surrogate has matrix interference.
Spike Conc.	The measured concentration, in sample basis units, of a spiked sample.
SURR-ND	Surrogate was not detected due to matrix interference or dilution.
ug/m3	Micrograms per cubic meter.
ug/mL	Micrograms per milliliter
mg/Kg	milligram per kilogram

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ANALYSIS REPORT
Polychlorinated Biphenyls by Gas Chromatography

Client	**NVL Field Services Division**	Samples Received*	**4**
SDG Number	**1413963.00**	Analyzed By	**Evelyn Ahulu**
Date Reported	**08/18/2014**	Samples Analyzed*	**4**
Project Number	**2012-494**	Analysis Method	**8082A**
Location	**3100 Airport Way South, Seattle, WA 98134**	Preparation Method	**3546PR (PCB)**

* for this test only

Sample Number **8414MK-1** Received 08/12/2014
Lab Sample ID 14108005 Matrix Material
Initial Sample Size 2.0523 gm Units of Result mg/Kg, as received

Analyte	RL	Final Result	Analysis Date
Aroclor-1016	0.97	< 0.97	08/15/2014
Aroclor-1221	0.97	< 0.97	08/15/2014
Aroclor-1232	0.97	< 0.97	08/15/2014
Aroclor-1242	0.97	< 0.97	08/15/2014
Aroclor-1248	0.97	< 0.97	08/15/2014
Aroclor-1254	0.97	1.5	08/15/2014
Aroclor-1260	0.97	0.98	08/15/2014
PCBs, Total	**0.97**	**2.48**	

Sample Number **8414MK-2** Received 08/12/2014
Lab Sample ID 14108006 Matrix Material
Initial Sample Size 2.0463 gm Units of Result mg/Kg, as received

Analyte	RL	Final Result	Analysis Date
Aroclor-1016	0.98	< 0.98	08/15/2014
Aroclor-1221	0.98	< 0.98	08/15/2014
Aroclor-1232	0.98	< 0.98	08/15/2014
Aroclor-1242	0.98	< 0.98	08/15/2014
Aroclor-1248	0.98	< 0.98	08/15/2014
Aroclor-1254	0.98	2.5	08/15/2014
Aroclor-1260	0.98	< 0.98	08/15/2014
PCBs, Total	**0.98**	**2.5**	

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ANALYSIS REPORT

Polychlorinated Biphenyls by Gas Chromatography

Sample Number	**8414MK-3**	Received	08/12/2014
Lab Sample ID	14108007	Matrix	Material
Initial Sample Size	2.0108 gm	Units of Result	mg/Kg, as received

Analyte	RL	Final Result	Analysis Date
Aroclor-1016	0.99	< 0.99	08/15/2014
Aroclor-1221	0.99	< 0.99	08/15/2014
Aroclor-1232	0.99	< 0.99	08/15/2014
Aroclor-1242	0.99	< 0.99	08/15/2014
Aroclor-1248	0.99	< 0.99	08/15/2014
Aroclor-1254	0.99	1.3	08/15/2014
Aroclor-1260	0.99	< 0.99	08/15/2014
PCBs, Total	**0.99**	**1.3**	

Sample Number	**8414MK-4**	Received	08/12/2014
Lab Sample ID	14108007	Matrix	Material
Initial Sample Size	2.0073 gm	Units of Result	mg/Kg, as received

Analyte	RL	Final Result	Analysis Date
Aroclor-1016	1.0	< 1.0	08/15/2014
Aroclor-1221	1.0	< 1.0	08/15/2014
Aroclor-1232	1.0	< 1.0	08/15/2014
Aroclor-1242	1.0	< 1.0	08/15/2014
Aroclor-1248	1.0	< 1.0	08/15/2014
Aroclor-1254	1.0	< 1.0	08/15/2014
Aroclor-1260	1.0	< 1.0	08/15/2014
PCBs, Total	**1.0**	**<1**	

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Quality Control Results

Project Number:	**2012-494**	**SDG Number:**	**1413963**
		Project Manager:	**Munaf Khan**
QC Batch(es):	**Q904**	Analysis Method:	**8082A**
QC Batch Method:	3546PR (PCB)	Analysis Description:	Polychlorinated Biphenyls by Gas Chromatography
Preparation Date:	08/15/2014		

Blank:MBLK-1413963

Analyte	Blank Result	Units	DF	RL	Control Limit	Qualifiers
Aroclor-1016	ND	mg/Kg	1	1.0	1	
Aroclor-1221	ND	mg/Kg	1	1.0	1	
Aroclor-1232	ND	mg/Kg	1	1.0	1	
Aroclor-1242	ND	mg/Kg	1	1.0	1	
Aroclor-1248	ND	mg/Kg	1	1.0	1	
Aroclor-1254	ND	mg/Kg	1	1.0	1	
Aroclor-1260	ND	mg/Kg	1	1.0	1	
PCBs, Total	ND	mg/Kg	1	1.0	1	
Surrogates:					% Rec	
Tetrachloro-m-xylene			1		49 40-140	
Decachlorobiphenyl			1		86 40-140	

Lab Control Sample:LCS-1254-1413963

Analyte	Blank Spike Result	Units	DF	Spike Conc.	% Rec	% Rec Limits	Qualifiers
Aroclor-1254	13.3	mg/Kg	1	20.0	67	40-140	
Surrogates:							
Tetrachloro-m-xylene			1		60	40-140	
Decachlorobiphenyl			1		80	40-140	

Lab Control Sample:LCS-1016+1260-1413963
Lab Control Sample Duplicate: LCS Dup-1413963

Analyte	Blank Spike Result	Units	DF	Spike Conc.	% Rec	Limits	RPD	RPD Limit	Qualifiers
Aroclor-1016	15.6	mg/Kg	1	20.0	78	40-140			
	17.2			20.0	86	40-140	10	50	
Aroclor-1260	19.7	mg/Kg	1	20.0	98	40-140			
	19.6			20.0	98	40-140	1	50	
Surrogates:									
Tetrachloro-m-xylene			1		73	40-140			
					73	40-140			
Decachlorobiphenyl			1		91	40-140			
					98	40-140			

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Surrogate Recovery Summary Report

Client NVL Field Services Division **SDG Number** 1413963

Project 2012-494

Customer Sample ID	Lab Sample ID	Analyte	Recovery	Limits
8414MK-1	14108005	Decachlorobiphenyl	82%	40-140
8414MK-1	14108005	Tetrachloro-m-xylene	72%	40-140
8414MK-2	14108006	Decachlorobiphenyl	90%	40-140
8414MK-2	14108006	Tetrachloro-m-xylene	66%	40-140
8414MK-3	14108007	Decachlorobiphenyl	93%	40-140
8414MK-3	14108007	Tetrachloro-m-xylene	64%	40-140
8414MK-4	14108008	Decachlorobiphenyl	88%	40-140
8414MK-4	14108008	Tetrachloro-m-xylene	77%	40-140
LCS Dup-1413963	LCS Dup-1413963	Decachlorobiphenyl	98%	40-140
LCS Dup-1413963	LCS Dup-1413963	Tetrachloro-m-xylene	73%	40-140
LCS-1016+1260-1413963	LCS-1016+1260-1413963	Decachlorobiphenyl	91%	40-140
LCS-1016+1260-1413963	LCS-1016+1260-1413963	Tetrachloro-m-xylene	73%	40-140
LCS-1254-1413963	LCS-1254-1413963	Decachlorobiphenyl	80%	40-140
LCS-1254-1413963	LCS-1254-1413963	Tetrachloro-m-xylene	60%	40-140
MBLK-1413963	MBLK-1413963	Decachlorobiphenyl	86%	40-140
MBLK-1413963	MBLK-1413963	Tetrachloro-m-xylene	49%	40-140

* Recovery outside limits

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

SDG No: **1413963** Contract: **N/A**

Determination: **8082 PCB Aroclors <Material>**

Run	Sample	Source	Analyzed	Analyte	True	Found	Unit	% Rec	Limits
R000897	CCV1 1016 -1260	PCB_2014-1-17	08/15/2014	Aroclor-1016	5	5	ug/mL	100	80-120
		PCB_2014-1-17	08/15/2014	Aroclor-1260	5	5	ug/mL	100	80-120
	CCV1 1254	PCB_2014-1-18	08/15/2014	Aroclor-1254	5	5	ug/mL	100	80-120
	CCV2 1016-1260	PCB_2014-1-17	08/15/2014	Aroclor-1016	5	5.704	ug/mL	114	80-120
		PCB_2014-1-17	08/15/2014	Aroclor-1260	5	4.766	ug/mL	95	80-120
	CCV2 1254	PCB_2014-1-18	08/15/2014	Aroclor-1254	5	4.89	ug/mL	98	80-120

% Rec = Percent recovery

* = Percent recovery not within control limits

ORGANICS LABORATORY SERVICES

NVL

Company	NVL Field Services Division	**NVL Batch Number**	1413963.00
Address	4708 Aurora Ave. N.	**TAT**	5 Days
	Seattle, WA 98103	**Rush TAT**	
Project Manager	Mr. Munaf Khan	**Due Date**	8/19/2014 **Time** 5:00 PM
Phone	(206) 547-0100	**Email**	munaf.k@nvllabs.com
Cell:	(206) 914-4646	**Fax**	(206) 634-1936

Project Name/Number: 2012-494 **Project Location:** 3100 Airport Way South Seattle, WA 98134

Subcategory Quantitative analysis

Item Code ORG-05 **Method** 8082 PCB Aroclors <Bulk>

Total Number of Samples 4 Rush Samples

	Lab ID	Sample ID	Description	A/R
1	14108005	8414MK-1		A
2	14108006	8414MK-2		A
3	14108007	8414MK-3		A
4	14108008	8414MK-4		A

Ulms run # 897

	Print Name	Signature	Company	Date	Time
Sampled by	Client				
Relinquished by	Client				
Office Use Only	Print Name	Signature	Company	Date	Time
Received by	Justin Shearer		NVL	8/12/14	1700
Analyzed by	Evelyn Ahulu		NVL	8/18/14	14:00
Results Called by					
☐ **Faxed** ☐ **Emailed**					

Special Instructions:

Entered By: Justin Shearer Date: 8/12/2014 Time: 6:15 PM 1 of 1

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October 2, 2014

Mr. Munaf Khan

NVL Field Services Division
4708 Aurora Ave. N.
Seattle, 98103

Re: **NVL Batch 1417235.00**

Project Name/Number: 2012-494

Project location: 3100 Airport Way South, Seattle, WA 98134

Dear Mr. Khan,

Enclosed please find test results for samples submitted to our laboratory for analysis. Preparation and analysis of these samples were conducted in accordance with published industry standards and methods specified on the attached analytical report.

The content of this package consists of the following:

-Case Narrative & Definition of Data Qualifiers
-Analytical Test Results
-Applicable QC Summary
-Client Chain-of-Custody (CoC)
-NVL Receiving Record

The report is considered highly confidential and will not be released without your approval. Samples are archived for two weeks following analysis. Samples that are not retrieved by the client will be discarded after two weeks.

Thank you for using our laboratory services. If you need further assistance, please contact us at 206-547-0100 or 1-888-NVLLABS.

Sincerely,

Nick Ly, Technical Director

Enclosure: Sample Results

Case Narrative:

The following summarizes samples received on date as shown on the accompanied Chain of custody by NVL Laboratories, Inc. from NVL Field Services Division for Project Number: 2012-494. Samples were logged in for PCB analysis per client request using both customer sample ID's and laboratory assigned ID's as listed on the Chain-of-Custody (CoC). All samples as received were processed and analyzed within specified turnaround time without any abnormalities and deviations that may affect the analytical results. All quality control requirements were acceptable unless stated otherwise. The conditions of all samples were acceptable at time of receipt and all samples submitted with this batch were analyzed unless stated otherwise on the CoC.

Test Results are reported based on dry weight in milligram per kilograms (mg/kg) for PCB samples as shown on the analytical reports.

NVL Laboratories, Inc.
4708 Aurora Ave N, Seattle, WA 98103
p 206.547.0100 | f 206.634.1936 | www.nvllabs.com

Definition Appendix

Terms

% Rec	Percent recovery.
<	Below Reporting Limit(RL) or Limit of Quantitation(LoQ) of the instrument.
B	Blank contamination. The recorded results is associated with a contaminated blank.
DF	Dilution Factor
J	The reported concentration is an estimated value because something may be present in the sample that interfered with the analysis.
J1	The reported concentration is an estimated value because the laboratory control sample (LCS) is out of control limits.
J2	The reported concentration is an estimated value because the percent recovery for matrix spike is out of control limits.
J3	The reported concentration is an estimated value because the relative percent difference(RPD) for duplicate analysis is out of control limits.
J4	Percent recovery is outside of established control limits.
LCS	Laboratory Control Sample.
LFS	Laboratory Fortified Spike
Limits	The upper and lower control limits for spike recoveries.
LN	Quality control sample is outside of control limits. This analyte was not detected in the sample.
LOQ	Limit of quantitation(same as RL)
mg/kg	Milligrams per kilogram.
ND	Analyte not detected or below the reporting limit of the instrument or methodology

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Definition Appendix

Terms

PPM	Parts per Million.
QC Batch Group	Quality Control Batch Group. The entity that links analytical results and supporting quality control results.
R	The data are not reliable due to possible contamination or loss of material during preparation or analysis. Re-sampling and reanalysis are necessary for verification.
RL	Reporting Limit. The minimum concentration that can be quantified under routine operating conditions.
RPD	Relative Percent Difference. The relative difference between duplicate results(matrix spike, blank spike, or samples duplicate) expressed as a percentage.
RPD Limit	The maximum RPD allowed for a set of duplicate measurements(see RPD).
SMI	Surrogate has matrix interference.
Spike Conc.	The measured concentration, in sample basis units, of a spiked sample.
SURR-ND	Surrogate was not detected due to matrix interference or dilution.
ug/m3	Micrograms per cubic meter.
ug/mL	Micrograms per milliliter
mg/Kg	milligram per kilogram

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ANALYSIS REPORT

Polychlorinated Biphenyls by Gas Chromatography

Client	**NVL Field Services Division**	Samples Received*	**2**
SDG Number	**1417235.00**	Analyzed By	**Evelyn Ahulu**
Date Reported	**10/02/2014**	Samples Analyzed*	**2**
Project Number	**2012-494**	Analysis Method	**8082A**
Location	**3100 Airport Way South, Seattle, WA 98134**	Preparation Method	**3546PR (PCB)**

* for this test only

Sample Number	**Bldg-11 West**	Received	09/29/2014
Lab Sample ID	14125190	Matrix	Material
Initial Sample Size	2.216 gm	Units of Result	mg/Kg,as received

Analyte	RL	Final Result	Analysis Date
Aroclor-1016	0.90	< 0.90	10/01/2014
Aroclor-1221	0.90	< 0.90	10/01/2014
Aroclor-1232	0.90	< 0.90	10/01/2014
Aroclor-1242	0.90	< 0.90	10/01/2014
Aroclor-1248	0.90	< 0.90	10/01/2014
Aroclor-1254	0.90	1.9	10/01/2014
Aroclor-1260	0.90	0.97	10/01/2014
PCBs, Total	**0.90**	**2.87**	

Sample Number	**Bldg-13 North**	Received	09/29/2014
Lab Sample ID	14125191	Matrix	Material
Initial Sample Size	2.011 gm	Units of Result	mg/Kg,as received

Analyte	RL	Final Result	Analysis Date
Aroclor-1016	0.99	< 0.99	10/01/2014
Aroclor-1221	0.99	< 0.99	10/01/2014
Aroclor-1232	0.99	< 0.99	10/01/2014
Aroclor-1242	0.99	< 0.99	10/01/2014
Aroclor-1248	0.99	< 0.99	10/01/2014
Aroclor-1254	0.99	< 0.99	10/01/2014
Aroclor-1260	0.99	< 0.99	10/01/2014
PCBs, Total	**0.99**	**<0.99**	

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Quality Control Results

Project Number:	**2012-494**	**SDG Number:**	**1417235**
		Project Manager:	**Munaf Khan**
QC Batch(es):	**Q906**	Analysis Method:	**8082A**
QC Batch Method:	3546PR (PCB)	Analysis Description:	Polychlorinated Biphenyls by Gas Chromatography
Preparation Date:	10/01/2014		

Blank:MB-1417235

Analyte	Blank Result	Units	DF	RL	Control Limit	Qualifiers
Aroclor-1016	ND	mg/Kg	1	1.0	1	
Aroclor-1221	ND	mg/Kg	1	1.0	1	
Aroclor-1232	ND	mg/Kg	1	1.0	1	
Aroclor-1242	ND	mg/Kg	1	1.0	1	
Aroclor-1248	ND	mg/Kg	1	1.0	1	
Aroclor-1254	ND	mg/Kg	1	1.0	1	
Aroclor-1260	ND	mg/Kg	1	1.0	1	
PCBs, Total	ND	mg/Kg	1	1.0	1	
Surrogates:					% Rec	
Tetrachloro-m-xylene			1		69 40-140	
Decachlorobiphenyl			1		95 40-140	

Lab Control Sample:LCS-1254-1417235

Analyte	Blank Spike Result	Units	DF	Spike Conc.	% Rec	% Rec Limits	Qualifiers
Aroclor-1254	18.5	mg/Kg	1	20.0	93	40-140	
Surrogates:							
Tetrachloro-m-xylene			1		79	40-140	
Decachlorobiphenyl			1		103	40-140	

Lab Control Sample:LCS-1016+1260-1417235
Lab Control Sample Duplicate: LCS Dup-1417235

Analyte	Blank Spike Result	Units	DF	Spike Conc.	% Rec	Limits	RPD	RPD Limit	Qualifiers
Aroclor-1016	15.5	mg/Kg	1	20.0	77	40-140			
	16.9			20.0	85	40-140	9	50	
Aroclor-1260	25.4	mg/Kg	1	20.0	127	40-140			
	23.4			20.0	117	40-140	8	50	
Surrogates:									
Tetrachloro-m-xylene			1		75	40-140			
					70	40-140			
Decachlorobiphenyl			1		107	40-140			
					90	40-140			

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Surrogate Recovery Summary Report

Client NVL Field Services Division **SDG Number** 1417235

Project 2012-494

Customer Sample ID	Lab Sample ID	Analyte	Recovery	Limits
Bldg-11 West	14125190	Decachlorobiphenyl	90%	40-140
Bldg-11 West	14125190	Tetrachloro-m-xylene	73%	40-140
Bldg-13 North	14125191	Decachlorobiphenyl	100%	40-140
Bldg-13 North	14125191	Tetrachloro-m-xylene	78%	40-140
LCS Dup-1417235	LCS Dup-1417235	Decachlorobiphenyl	90%	40-140
LCS Dup-1417235	LCS Dup-1417235	Tetrachloro-m-xylene	70%	40-140
LCS-1016+1260-1417235	LCS-1016+1260-1417235	Decachlorobiphenyl	107%	40-140
LCS-1016+1260-1417235	LCS-1016+1260-1417235	Tetrachloro-m-xylene	75%	40-140
LCS-1254-1417235	LCS-1254-1417235	Decachlorobiphenyl	103%	40-140
LCS-1254-1417235	LCS-1254-1417235	Tetrachloro-m-xylene	79%	40-140
MB-1417235	MB-1417235	Decachlorobiphenyl	95%	40-140
MB-1417235	MB-1417235	Tetrachloro-m-xylene	69%	40-140

* Recovery outside limits

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

SDG No: **1417235** Contract: **N/A**

Determination: **8082 PCB Aroclors <Material>**

Run	Sample	Source	Analyzed	Analyte	True	Found	Unit	% Rec	Limits
R000899	CCV1 1016-1260	PCB_2014-1-17	10/01/2014	Aroclor-1016	5	5	ug/mL	100	80-120
		PCB_2014-1-17	10/01/2014	Aroclor-1260	5	5	ug/mL	100	80-120
	CCV1 1254	PCB_2014-1-18	10/01/2014	Aroclor-1254	5	5	ug/mL	100	80-120
	CCV2 1016-1260	PCB_2014-1-17	10/01/2014	Aroclor-1016	5	5.622	ug/mL	112	80-120
		PCB_2014-1-17	10/01/2014	Aroclor-1260	5	5.418	ug/mL	108	80-120
	CCV2 1254	PCB_2014-1-18	10/01/2014	Aroclor-1254	5	5.666	ug/mL	113	80-120

% Rec = Percent recovery

* = Percent recovery not within control limits

ORGANICS LABORATORY SERVICES

NVL

Company	NVL Field Services Division	**NVL Batch Number**	**1417235.00**
Address	4708 Aurora Ave. N.	**TAT**	3 Days **AH** No
	Seattle, WA 98103	**Rush TAT**	
Project Manager	Mr. Munaf Khan	**Due Date**	10/2/2014 **Time** 1:15 PM
Phone	(206) 547-0100	**Email**	munaf.k@nvllabs.com
Cell:	(206) 914-4646	**Fax**	(206) 634-1936

Project Name/Number: 2012-494 **Project Location:** 3100 Airport Way South, Seattle, WA 98134

Subcategory Quantitative analysis

Item Code ORG-05 **Method** 8082 PCB Aroclors <Bulk>

Total Number of Samples 2 Rush Samples

	Lab ID	Sample ID	Description	A/R
1	14125190	Bldg-11 West		A
2	14125191	Bldg-13 North		A

	Print Name	Signature	Company	Date	Time
Sampled by	Client				
Relinquished by	Client				

Office Use Only	Print Name	Signature	Company	Date	Time
Received by	Fatima Khan		NVL	9/29/14	1315
Analyzed by	Evelyn Ahulu		NVL	10/1/14	14:00
Results Called by					
☐ **Faxed** ☐ **Emailed**					

Special Instructions:

Entered By: Fatima Khan Date: 9/29/2014 Time: 2:50 PM

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RCLLC 0006855

October 10, 2014

Mr. Marcus Gladden

NVL Field Services Division
4708 Aurora Ave. N.
Seattle, 98103

Re: **NVL Batch 1418022.00**

Project Name/Number: 2012-494

Project location: 3100 Airport Way South, Seattle, WA 98134

Dear Mr. Gladden,

Enclosed please find test results for samples submitted to our laboratory for analysis. Preparation and analysis of these samples were conducted in accordance with published industry standards and methods specified on the attached analytical report.

The content of this package consists of the following:

-Case Narrative & Definition of Data Qualifiers
-Analytical Test Results
-Applicable QC Summary
-Client Chain-of-Custody (CoC)
-NVL Receiving Record

The report is considered highly confidential and will not be released without your approval. Samples are archived for two weeks following analysis. Samples that are not retrieved by the client will be discarded after two weeks.

Thank you for using our laboratory services. If you need further assistance, please contact us at 206-547-0100 or 1-888-NVLLABS.

Sincerely,

Nick Ly, Technical Director

Enclosure: Sample Results

Case Narrative:

The following summarizes samples received on date as shown on the accompanied Chain of custody by NVL Laboratories, Inc. from NVL Field Services Division for Project Number: 2012-494. Samples were logged in for PCB analysis per client request using both customer sample ID's and laboratory assigned ID's as listed on the Chain-of-Custody (CoC). All samples as received were processed and analyzed within specified turnaround time without any abnormalities and deviations that may affect the analytical results. All quality control requirements were acceptable unless stated otherwise. The conditions of all samples were acceptable at time of receipt and all samples submitted with this batch were analyzed unless stated otherwise on the CoC.

Test Results are reported based on dry weight in milligram per kilograms (mg/kg) for PCB samples as shown on the analytical reports.

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Definition Appendix

Terms

% Rec	Percent recovery.
<	Below Reporting Limit(RL) or Limit of Quantitation(LoQ) of the instrument.
B	Blank contamination. The recorded results is associated with a contaminated blank.
DF	Dilution Factor
J	The reported concentration is an estimated value because something may be present in the sample that interfered with the analysis.
J1	The reported concentration is an estimated value because the laboratory control sample (LCS) is out of control limits.
J2	The reported concentration is an estimated value because the percent recovery for matrix spike is out of control limits.
J3	The reported concentration is an estimated value because the relative percent difference(RPD) for duplicate analysis is out of control limits.
J4	Percent recovery is outside of established control limits.
LCS	Laboratory Control Sample.
LFS	Laboratory Fortified Spike
Limits	The upper and lower control limits for spike recoveries.
LN	Quality control sample is outside of control limits. This analyte was not detected in the sample.
LOQ	Limit of quantitation(same as RL)
mg/kg	Milligrams per kilogram.
ND	Analyte not detected or below the reporting limit of the instrument or methodology

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RPD	Relative Percent Difference. The relative difference between duplicate results(matrix spike, blank spike, or samples duplicate) expressed as a percentage.
RPD Limit	The maximum RPD allowed for a set of duplicate measurements(see RPD).
SMI	Surrogate has matrix interference.
Spike Conc.	The measured concentration, in sample basis units, of a spiked sample.
SURR-ND	Surrogate was not detected due to matrix interference or dilution.
ug/m3	Micrograms per cubic meter.
ug/mL	Micrograms per milliliter
mg/Kg	milligram per kilogram

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ANALYSIS REPORT

PolychlorinatedBiphenyls by Gas Chromatography

Client	**NVL Field Services Division**	Samples Received*	**2**
SDG Number	**1418022.00**	Analyzed By	**Shalini Patel**
Date Reported	**10/10/2014**	Samples Analyzed*	**2**
Project Number	**2012-494**	Analysis Method	**8082A**
Location	**3100 Airport Way South, Seattle, WA 98134**	Preparation Method	**3546PR (PCB)**

* for this test only

Sample Number **10914-BULK-1** Received 10/09/2014

Lab Sample ID 14128826 Matrix Material

Initial Sample Size 1.0403 gm Units of Result mg/Kg,as received

Analyte	RL	Final Result	Analysis Date
Aroclor-1016	19	< 19	10/10/2014
Aroclor-1221	19	< 19	10/10/2014
Aroclor-1232	19	< 19	10/10/2014
Aroclor-1242	19	< 19	10/10/2014
Aroclor-1248	19	< 19	10/10/2014
Aroclor-1254	19	100	10/10/2014
Aroclor-1260	19	29	10/10/2014
PCBs, Total	**19**	**129**	

Sample Number **10914-BULK-2** Received 10/09/2014

Lab Sample ID 14128827 Matrix Material

Initial Sample Size 2.0156 gm Units of Result mg/Kg,as received

Analyte	RL	Final Result	Analysis Date
Aroclor-1016	0.99	< 0.99	10/10/2014
Aroclor-1221	0.99	< 0.99	10/10/2014
Aroclor-1232	0.99	< 0.99	10/10/2014
Aroclor-1242	0.99	< 0.99	10/10/2014
Aroclor-1248	0.99	< 0.99	10/10/2014
Aroclor-1254	0.99	2.8	10/10/2014
Aroclor-1260	0.99	1.5	10/10/2014
PCBs, Total	**0.99**	**4.3**	

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Quality Control Results

Project Number:	**2012-494**	**SDG Number:**	**1418022**
		Project Manager:	**Marcus Gladden**
QC Batch(es):	**Q905**	Analysis Method:	**8082A**
QC Batch Method:	3546PR (PCB)	Analysis Description:	Polychlorinated Biphenyls by Gas Chromatography
Preparation Date:	10/09/2014		

Blank:MB-1418022

Analyte	Blank Result	Units	DF	RL	Control Limit	Qualifiers
Aroclor-1016	ND	mg/Kg	1	1.0	1	
Aroclor-1221	ND	mg/Kg	1	1.0	1	
Aroclor-1232	ND	mg/Kg	1	1.0	1	
Aroclor-1242	ND	mg/Kg	1	1.0	1	
Aroclor-1248	ND	mg/Kg	1	1.0	1	
Aroclor-1254	ND	mg/Kg	1	1.0	1	
Aroclor-1260	ND	mg/Kg	1	1.0	1	
PCBs, Total	ND	mg/Kg	1	1.0	1	
Surrogates:					% Rec	
Tetrachloro-m-xylene			1		62 40-140	
Decachlorobiphenyl			1		87 40-140	

Lab Control Sample:LCS-1254-1418022

Analyte	Blank Spike Result	Units	DF	Spike Conc.	% Rec	% Rec Limits	Qualifiers
Aroclor-1254	15.5	mg/Kg	1	20.0	78	40-140	
Surrogates:							
Tetrachloro-m-xylene			1		63	40-140	
Decachlorobiphenyl			1		78	40-140	

Lab Control Sample:LCS-1016+1260-1418022
Lab Control Sample Duplicate: LCS Dup-1418022

Analyte	Blank Spike Result	Units	DF	Spike Conc.	% Rec	Limits	RPD	RPD Limit	Qualifiers
Aroclor-1016	13.3	mg/Kg	1	20.0	67	40-140			
	13.3			20.0	67	40-140	0	50	
Aroclor-1260	16.2	mg/Kg	1	20.0	81	40-140			
	14.9			20.0	74	40-140	9	50	
Surrogates:									
Tetrachloro-m-xylene			1		54	40-140			
					52	40-140			
Decachlorobiphenyl			1		70	40-140			
					64	40-140			

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Surrogate Recovery Summary Report

Client NVL Field Services Division **SDG Number** 1418022

Project 2012-494

Customer Sample ID	Lab Sample ID	Analyte	Recovery	Limits
10914-BULK-1-DL	14128826DL1	Decachlorobiphenyl	114%	40-140
10914-BULK-1-DL	14128826DL1	Tetrachloro-m-xylene	92%	40-140
10914-BULK-2	14128827	Decachlorobiphenyl	84%	40-140
10914-BULK-2	14128827	Tetrachloro-m-xylene	74%	40-140
LCS Dup-1418022	LCS Dup-1418022	Decachlorobiphenyl	64%	40-140
LCS Dup-1418022	LCS Dup-1418022	Tetrachloro-m-xylene	52%	40-140
LCS-1016+1260-1418022	LCS-1016+1260-1418022	Decachlorobiphenyl	70%	40-140
LCS-1016+1260-1418022	LCS-1016+1260-1418022	Tetrachloro-m-xylene	54%	40-140
LCS-1254-1418022	LCS-1254-1418022	Decachlorobiphenyl	78%	40-140
LCS-1254-1418022	LCS-1254-1418022	Tetrachloro-m-xylene	63%	40-140
MB-1418022	MB-1418022	Decachlorobiphenyl	87%	40-140
MB-1418022	MB-1418022	Tetrachloro-m-xylene	62%	40-140

* Recovery outside limits

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

SDG No: **1418022** Contract: **N/A**

Determination: **8082 PCB Aroclors <Material>**

Run	Sample	Source	Analyzed	Analyte	True	Found	Unit	% Rec	Limits
R000898	CCV1-1016-1260	PCB_2014-1-17	10/10/2014	Aroclor-1016	5	5	ug/mL	100	80-120
		PCB_2014-1-17	10/10/2014	Aroclor-1260	5	5	ug/mL	100	80-120
	CCV1 1254	PCB_2014-1-18	10/10/2014	Aroclor-1254	5	5	ug/mL	100	80-120
	CCV2 1016-1260	PCB_2014-1-17	10/10/2014	Aroclor-1016	5	5.303	ug/mL	106	80-120
		PCB_2014-1-17	10/10/2014	Aroclor-1260	5	5.255	ug/mL	105	80-120
	CCV2 1254	PCB_2014-1-18	10/10/2014	Aroclor-1254	5	5.442	ug/mL	109	80-120

% Rec = Percent recovery

* = Percent recovery not within control limits

ORGANICS LABORATORY SERVICES

NVL

Company	NVL Field Services Division	**NVL Batch Number**	**1418022.00**
Address	4708 Aurora Ave. N. Seattle, WA 98103	**TAT**	1 Day **AH** No **Rush TAT**
Project Manager	Mr. Marcus Gladden	**Due Date**	10/10/2014 **Time** 2:15 PM
Phone	(206) 547-0100	**Email**	marcus.g@nvllabs.com
cell	(206) 981-9421 3	**Fax**	(206) 634-1936

Project Name/Number: 2012-494 **Project Location:** 3100 Airport Way South Seattle,WA 98134

Subcategory Quantitative analysis

Item Code ORG-05 **Method** 8082 PCB Aroclors <Bulk>

Total Number of Samples 2 Rush Samples

	Lab ID	Sample ID	Description	A/R
1	14128826	10914-BULK-1		A
2	14128827	10914-BULK-2		A

	Print Name	Signature	Company	Date	Time
Sampled by	Client				
Relinquished by	Client				

Office Use Only	Print Name	Signature	Company	Date	Time
Received by	Midori Koike		NVL	10/9/14	1415
Analyzed by	Shalini Patel		NVL	10/10/14	1700
Results Called by					
☐ **Faxed** ☐ **Emailed**					

Special Instructions:

Entered By: Midori Koike Date: 10/9/2014 Time: 3:29 PM 1 of 1

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RCLLC 0006864

December 8, 2014

Mr. Marcus Gladden

NVL Field Services Division
4708 Aurora Ave. N.
Seattle, 98103

Re: **NVL Batch 1421389.00**

Project Name/Number: 2012-494

Project location: 3100 Airport Way South, Seattle, WA 98134

Dear Mr. Gladden,

Enclosed please find test results for samples submitted to our laboratory for analysis. Preparation and analysis of these samples were conducted in accordance with published industry standards and methods specified on the attached analytical report.

The content of this package consists of the following:

-Case Narrative & Definition of Data Qualifiers
-Analytical Test Results
-Applicable QC Summary
-Client Chain-of-Custody (CoC)
-NVL Receiving Record

The report is considered highly confidential and will not be released without your approval. Samples are archived for two weeks following analysis. Samples that are not retrieved by the client will be discarded after two weeks.

Thank you for using our laboratory services. If you need further assistance, please contact us at 206-547-0100 or 1-888-NVLLABS.

Sincerely,

Nick Ly, Technical Director

Enclosure: Sample Results

Case Narrative:

The following summarizes samples received on date as shown on the accompanied Chain of custody by NVL Laboratories, Inc. from NVL Field Services Division for Project Number: 2012-494. Samples were logged in for PCB analysis per client request using both customer sample ID's and laboratory assigned ID's as listed on the Chain-of-Custody (CoC). All samples as received were processed and analyzed within specified turnaround time without any abnormalities and deviations that may affect the analytical results. All quality control requirements were acceptable unless stated otherwise. The conditions of all samples were acceptable at time of receipt and all samples submitted with this batch were analyzed unless stated otherwise on the CoC.

Test Results are reported based on dry weight in milligram per kilograms (mg/kg) for PCB samples as shown on the analytical reports.

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Definition Appendix

Terms

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DF	Dilution Factor
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J1	The reported concentration is an estimated value because the laboratory control sample (LCS) is out of control limits.
J2	The reported concentration is an estimated value because the percent recovery for matrix spike is out of control limits.
J3	The reported concentration is an estimated value because the relative percent difference(RPD) for duplicate analysis is out of control limits.
J4	Percent recovery is outside of established control limits.
LCS	Laboratory Control Sample.
LFS	Laboratory Fortified Spike
Limits	The upper and lower control limits for spike recoveries.
LN	Quality control sample is outside of control limits. This analyte was not detected in the sample.
LOQ	Limit of quantitation(same as RL)
mg/kg	Milligrams per kilogram.
ND	Analyte not detected or below the reporting limit of the instrument or methodology

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Definition Appendix

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Spike Conc.	The measured concentration, in sample basis units, of a spiked sample.
SURR-ND	Surrogate was not detected due to matrix interference or dilution.
ug/m3	Micrograms per cubic meter.
ug/mL	Micrograms per milliliter
mg/Kg	milligram per kilogram

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ANALYSIS REPORT

PolychlorinatedBiphenyls by Gas Chromatography

Client	**NVL Field Services Division**	Samples Received*	**2**
SDG Number	**1421389.00**	Analyzed By	**Evelyn Ahulu**
Date Reported	**12/08/2014**	Samples Analyzed*	**2**
Project Number	**2012-494**	Analysis Method	**8082A**
Location	**3100 Airport Way South, Seattle, WA 98134**	Preparation Method	**3546PR (PCB)**

* for this test only

Sample Number **12114-PCB-1** Received 12/01/2014

Lab Sample ID 14145438 Matrix Material

Initial Sample Size 2.0219 gm Units of Result mg/Kg,as received

Analyte	RL	Final Result	Analysis Date
Aroclor-1016	0.99	< 0.99	12/04/2014
Aroclor-1221	0.99	< 0.99	12/04/2014
Aroclor-1232	0.99	< 0.99	12/04/2014
Aroclor-1242	0.99	< 0.99	12/04/2014
Aroclor-1248	0.99	< 0.99	12/04/2014
Aroclor-1254	0.99	1.1	12/04/2014
Aroclor-1260	0.99	< 0.99	12/04/2014
PCBs, Total	**0.99**	**1.1**	

Comments: Bldg. 11 W. Sandstone

Sample Number **12114-PCB-2** Received 12/01/2014

Lab Sample ID 14145439 Matrix Material

Initial Sample Size 2.0009 gm Units of Result mg/Kg,as received

Analyte	RL	Final Result	Analysis Date
Aroclor-1016	1.0	< 1.0	12/04/2014
Aroclor-1221	1.0	< 1.0	12/04/2014
Aroclor-1232	1.0	< 1.0	12/04/2014
Aroclor-1242	1.0	< 1.0	12/04/2014
Aroclor-1248	1.0	< 1.0	12/04/2014
Aroclor-1254	1.0	< 1.0	12/04/2014
Aroclor-1260	1.0	< 1.0	12/04/2014
PCBs, Total	**1.0**	**<1**	

Comments: Bldg. 13 N. Concrete

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Quality Control Results

Project Number:	**2012-494**	**SDG Number:**	**1421389**
		Project Manager:	**Marcus Gladden**
QC Batch(es):	**Q213**	Analysis Method:	**8082A**
QC Batch Method:	3546PR (PCB)	Analysis Description:	Polychlorinated Biphenyls by Gas Chromatography
Preparation Date:	12/02/2014		

Blank:MB-1421389

Analyte	Blank Result	Units	DF	RL	Control Limit	Qualifiers
Aroclor-1016	ND	mg/Kg	1	1.0	1	
Aroclor-1221	ND	mg/Kg	1	1.0	1	
Aroclor-1232	ND	mg/Kg	1	1.0	1	
Aroclor-1242	ND	mg/Kg	1	1.0	1	
Aroclor-1248	ND	mg/Kg	1	1.0	1	
Aroclor-1254	ND	mg/Kg	1	1.0	1	
Aroclor-1260	ND	mg/Kg	1	1.0	1	
Aroclor-1262	ND	mg/Kg	1	1.0	1	
Aroclor-1268	ND	mg/Kg	1	1.0	1	
PCBs, Total	ND	mg/Kg	1	1.0	1	
Surrogates:					% Rec	
Tetrachloro-m-xylene			1		84 40-140	
Decachlorobiphenyl			1		93 40-140	

Lab Control Sample:LCS-1254-1421389

Analyte	Blank Spike Result	Units	DF	Spike Conc.	% Rec	% Rec Limits	Qualifiers
Aroclor-1254	10.3	mg/Kg	1	10.0	103	40-140	
Surrogates:							
Tetrachloro-m-xylene			1		40	40-140	
Decachlorobiphenyl			1		96	40-140	

Lab Control Sample:LCS-1016+1260-1421389
Lab Control Sample Duplicate: LCS DUP-1421389

Analyte	Blank Spike Result	Units	DF	Spike Conc.	% Rec	Limits	RPD	RPD Limit	Qualifiers
Aroclor-1016	7.45	mg/Kg	1	10.0	75	40-140			
	7.68			10.0	77	40-140	3	50	
Aroclor-1260	10.2	mg/Kg	1	10.0	102	40-140			
	9.87			10.0	99	40-140	4	50	
Surrogates:									
Tetrachloro-m-xylene			1		85	40-140			
					88	40-140			
Decachlorobiphenyl			1		92	40-140			
					100	40-140			

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Surrogate Recovery Summary Report

Client NVL Field Services Division **SDG Number** 1421389

Project 2012-494

Customer Sample ID	Lab Sample ID	Analyte	Recovery	Limits
12114-PCB-1	14145438	Decachlorobiphenyl	96%	40-140
12114-PCB-1	14145438	Tetrachloro-m-xylene	48%	40-140
12114-PCB-2	14145439	Decachlorobiphenyl	92%	40-140
12114-PCB-2	14145439	Tetrachloro-m-xylene	44%	40-140
LCS DUP-1421389	LCS DUP-1421389	Decachlorobiphenyl	100%	40-140
LCS DUP-1421389	LCS DUP-1421389	Tetrachloro-m-xylene	88%	40-140
LCS-1016+1260-1421389	LCS-1016+1260-1421389	Decachlorobiphenyl	92%	40-140
LCS-1016+1260-1421389	LCS-1016+1260-1421389	Tetrachloro-m-xylene	85%	40-140
LCS-1254-1421389	LCS-1254-1421389	Decachlorobiphenyl	96%	40-140
LCS-1254-1421389	LCS-1254-1421389	Tetrachloro-m-xylene	40%	40-140
MB-1421389	MB-1421389	Decachlorobiphenyl	93%	40-140
MB-1421389	MB-1421389	Tetrachloro-m-xylene	84%	40-140

* Recovery outside limits

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

SDG No: **1421389** Contract: **N/A**

Determination: **8082 PCB Aroclors <Material>**

Run	Sample	Source	Analyzed	Analyte	True	Found	Unit	% Rec	Limits
R000206	CCV1 1016-1260	PCB_2014-1-17	12/04/2014	Aroclor-1016	5	5	ug/mL	100	80-120
		PCB_2014-1-17	12/04/2014	Aroclor-1260	5	5	ug/mL	100	80-120
	CCV1 1254	PCB_2014-1-18	12/04/2014	Aroclor-1254	5	5	ug/mL	100	80-120
	ICV 1016-1260	PCB_2014-2-4	12/04/2014	Aroclor-1016	5	4.509	ug/mL	90	85-115
		PCB_2014-2-4	12/04/2014	Aroclor-1260	5	5.757	ug/mL	115	85-115
	CCV2 1016-1260	PCB_2014-1-17	12/04/2014	Aroclor-1016	5	4.58	ug/mL	92	80-120
		PCB_2014-1-17	12/04/2014	Aroclor-1260	5	4.88	ug/mL	98	80-120
	CCV2 1254	PCB_2014-1-18	12/04/2014	Aroclor-1254	5	5.288	ug/mL	106	80-120

% Rec = Percent recovery

* = Percent recovery not within control limits

ORGANICS LABORATORY SERVICES

NVL

Company	NVL Field Services Division	**NVL Batch Number**	**1421389.00**
Address	4708 Aurora Ave. N. Seattle, WA 98103	**TAT**	5 Days AH No
		Rush TAT	
Project Manager	Mr. Marcus Gladden	**Due Date**	12/8/2014 **Time** 4:00 PM
Phone	(206) 547-0100	**Email**	marcus.g@nvllabs.com
cell	(206) 981-9421 3	**Fax**	(206) 634-1936

Project Name/Number: 2012-494 **Project Location:** 3100 Airport Way South Seattle,WA 98134

Subcategory Quantitative analysis

Item Code ORG-05 **Method** 8082 PCB Aroclors <Bulk>

Total Number of Samples 2 Rush Samples

	Lab ID	Sample ID	Description	A/R
1	14145438	12114-PCB-1		A
2	14145439	12114-PCB-2		A

	Print Name	Signature	Company	Date	Time
Sampled by	Client				
Relinquished by	Client				

Office Use Only	Print Name	Signature	Company	Date	Time
Received by	Midori Koike		NVL	12/1/14	1600
Analyzed by	Evelyn Ahulu		NVL	12/4/14	12:00
Results Called by					
☐ **Faxed** ☐ **Emailed**					

Special Instructions:

Entered By: Midori Koike Date: 12/1/2014 Time: 4:44 PM 1 of 1

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RCLLC 0006873

NVL Laboratories, Inc.
4708 Aurora Ave N, Seattle, WA 98103
p 206.547.0100 | f 206.634.1936 | www.nvllabs.com

CHAIN of CUSTODY SAMPLE LOG

1421389

Client: NVL Laboratories Inc
Street: 4708 Aurora Ave N
Seattle, WA 98103
Project Manager: Munaf Khan
Project Location: 3100 Airport Way South
Seattle, WA 98134

NVL Batch Number:
Client Job Number: 2012-494
Total Samples: 2
Turn Around Time: ☐ 1 Hr ☐ 2 Hrs ☐ 4 Hrs ☐ 6 Hrs ☐ 1 Day ☐ 2 Days ☐ 3 Days ☐ 4 Days ☒ 5 Days ☐ 10 Days
Please call for TAT less than 24 Hrs
Email address:

Phone: (206) 447-0263 Fax: (206) 447-0299

☐ Asbestos Air	☐ PCM (NIOSH 7400)	☐ TEM (NIOSH 7402)	☐ TEM (AHERA)	☐ TEM (EPA Level II)	☐ Other
☐ Asbestos Bulk	☐ PLM (EPA/600/R-93/116)	☐ PLM (EPA Point Count)	☐ PLM (EPA Gravimetry)	☐ TEM BULK	
☐ Mold/Fungus	☐ Mold Air	☐ Mold Bulk	☐ Rotometer Calibration		

METALS	Det. Limit	Matrix		RCRA Metals		Other Metals
☐ Total Metals	☐ FAA (ppm)	☐ Air Filter	☐ Soil	☐ Arsenic (As)	☐ All 8	☐ All 3
☐ TCLP	☐ ICP (ppm)	☐ Drinking water	☐ Paint Chips in %	☐ Barium (Ba)	☐ Chromium (Cr	☐ Copper (Cu)
☐ Cr 6	☐ GFAA (ppb)	☐ Dust/wipe (Area)	☐ Paint Chips in cm	☐ Cadmium (Cd)	☐ Lead (Pb)	☐ Nickel (Ni)
					☐ Mercury (Hg)	☐ Zinc (Zn)

☒ Other Types of Analysis: ☐ Fiberglass ☐ Silica ☐ Nuisance Dust ☐ Respirable Dust ☒ Other (Specify) PCB's - Bulk - EPA 8082

Condition of Package: ☐ Good ☐ Damaged (no spillage) ☐ Severe damage (spillage)

Seq. #	Lab ID	Client Sample Number	Comments	A/R
1		12114-PCB-1	BLDG 11 W. SANDSTONE	
2		12114-PCB-2	BLDG 13 N. CONCRETE	
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				

	Print Below	Sign Below	Company	Date	Time
Sampled by	Marcus Cuevas		NVL Labs	12/1/14	13:00
Relinquished by				12/1/14	16:00
Received by	Melissa Kaiser		NVL	12/1/14	16:00
Analyzed by	Evelyn Abuda		NVL	12/4/14	15:00
Results Called by					
Results Faxed by					

Special Instructions: Unless requested in writing, all samples will be disposed of two (2) weeks after analysis.
Results report to

ATTACHMENT 3

RYAN SWANSON
Lawyers since 1897

Ryan, Swanson & Cleveland, PLLC
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Seattle, WA 98101-3034
206.464.4224 | Fax: 206.583.0359
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Jo M. Flannery
Attorney Of Counsel

direct dial 206.654.2241
flannery@ryanlaw.com
Ref. No. 1724000.01/015435.00010

September 28, 2018

Michelle Mullin, Project Manager
U.S. Environmental Protection Agency - Region 10
1200 Sixth Avenue, Suite 900, OCE-084
Seattle, WA 98101

Re: Rainier Commons Phase I Close Out Report - Response to Request for Additional Information

Dear Ms. Mullin,

This letter provides the responses and additional information requested in connection with your review of the Rainier Commons IPWP Phase I Close Out Report. We have reproduced EPA's requests here, with the response to each immediately following.

General Comments/Documentation Needs:

1. EPA Request:

A narrative explanation of waste handling, storage and disposal including a description of where the waste was sent and waste manifests or certificates of disposal.

Response:

Blasting debris, generated during the abatement process was collected inside the Negative Pressure Enclosure (NPE), and then transferred to DOT approved, one cubic yard "supersacks". These containers were then relocated by forklift to Building 15, for storage until shipment.

Building 15 is a two-story fully enclosed warehouse, which is both weatherproof and secure. The storage area inside the warehouse included a secondary containment area consisting of a continuous layer of 6-mil poly over a perimeter barrier constructed of straw waddles.

Transportation was arranged through Waste Management Inc. who utilized a combination of trucks and rail to deliver the waste materials to their final destination. The initial 27 supersacks were shipped to Columbia Ridge Landfill in Arlington, Oregon on October 16, 2014. On November 26, 2014, six 55-gallon

drums of waste water generated during asphalt cleanup were shipped to Chemical Waste Management in Arlington, Oregon. The final shipment of two 55-gallon drums and one supersack were shipped to Chemical Waste Management in Arlington, Oregon on December 9, 2014.

Shipping manifests and Bills of Lading were included at Exhibit 6 of the Phase One Close-out Report.

2. EPA Comment:

We did not see a description of the removal process, key operating parameters for media blasting as applied to each substrate material and any sub-sections. Please explain or provide such information, or identify where such information is in the submission.

Response:

Phase I work was conducted per the descriptions and removal process in the approved IPWP for Phase I, as stated in paragraph 2 of the Close-Out Report. The paint removal process consisted of a combination of abrasive blasting, followed by the use of hand tools, in this case small, hand-held grinders. All removal work was performed within the negative air containment. Key operating parameters for both processes were results based, in that the application of either process was not governed by factors such as blasting pressure, nozzle size, distance from substrate, or similar measures. The overarching parameter applied to both processes was to adjust as necessary in each area to achieve a result of 100 percent paint removal. This result was confirmed by the independent inspections conducted by NVL. The visual clearance inspection reports are included with the Phase I Close Out Report at Exhibit 1. Secondary parameters, such as damage to the underlying substrate (e.g. loss of mortar, brick surface) as a result of abatement work were considered, but were found to be in conflict with the overarching parameter, which was given priority. Persons performing the removal work were HAZWOPER certified and given discretion in determining equipment and operating parameters, within the scope of the approved IPWP, to best achieve 100 percent paint removal.

3. EPA Request:

We did not see information concerning construction, maintenance and operation parameters. Please explain or provide such information, or identify where such information is in the submission.

Response:

The Close Out Report affirms in paragraph 1 and 2 of the report that the work was performed pursuant to and performed as documented in the approved general

Work Plan and the approved IPWP for Phase I. Our intent was to incorporate those documents by reference, to avoid the need to repeat and reproduce the many details and exhibits in those documents. The general construction procedures submitted as part of the Phase One Individual Phased Work Plan (IPWP), Exhibit 2, pages 4 and 5; as well as the Containment Section sketch provided as Exhibit 6 were utilized. The 4x4 Cant, depicted on the Containment Section was not needed to form the outer floor/wall corner, and was therefore eliminated.

After construction, each Negative Pressure Enclosure (NPE) was fitted with the appropriate quantity of Negative Air Machines (NAM) to supply a minimum of 0.02 inches of negative differential air pressure. A three-stage decontamination unit was established at each NPE for both personnel and equipment use.

Prior to the start of blasting operations, each NPE was independently inspected and cleared for use by NVL Laboratories.

4. EPA Comment/Request:

We were unable to open the documents for exhibit 11b, c, d, e, g, h, i, j. Can you please verify they are accessible on your end and resubmit?

Response:

All of these documents are accessible and were readable on the CD submitted with the original copy of the report, prior to submission. We recently provided an additional electronic copy of the report to EPA. We are including a courtesy copy of those documents with this response for your ease of reference.

The following are questions we would like responses to:

1. EPA Question:

Were pre-clearance and post-clearance substrate samples collected at the same locations?

Answer:

Yes, all sample sets were co-located. With the exception of the sandstone testing, all pre and post samples were located within a six inch diameter circle of each other. For esthetic purposes, the sandstone samples were spaces approximately 10 inches apart.

2. EPA Question (three sub-parts):

   a. Is there a post-clearance sample for building 10-west?

b. It appears that building 11-west pre-clearance was 2.9 ppm in concrete, and post-clearance it was 1.1 in sandstone. Please explain.

c. Lab report does not match in total sample number to tables included in letter (only 6 samples in the attached lab report - but 7 pre-clearance samples, and 6 post-clearance samples). Please explain.

Answers:

a. Buildings 10 and 11 share a common front façade, consisting of brick, concrete, and sandstone. They are also internally connected across all common floors. Therefore, while they have two building numbers on our footprint plan, they are and so we treated them as one functional building for purposes of the remediation. Blasting operations occurred on both buildings 10 and 11 simultaneously. The pre and post clearance sampling for sandstone substrate representing both buildings' 10/11 facade were both collected from "Building 11". The pre-clearance sample identified as 10914-BULK-2 was incorrectly marked as being collected from Building 10 and should be corrected to accurately reflect a sample location of Building 11.

A pre-clearance sample, representing the concrete substrate from Buildings 10 and 11 was collected on June 29, 2014 (Sample # Bldg-11West). A post-clearance concrete sample for these buildings has not been located. Therefore, an additional bulk sample was collected on July 17, 2018. The post-clearance sample was co-located with the original sample. Sample results indicate Non-Detect for PCBs. See Laboratory report attached.

b. See response to a. above.

c. See a. above. Also, Exhibit 2 contains 14 sample reports. One of the samples from October 9, 2014 is not a substrate sample, 10914-Bulk 1, so it is not in the substrate sample tables. We wanted to analyze the blue paint. The blue paint sample was collected at the same time as a substrate sample so its results are on the 21 pages of lab reports. The chain of custody sheet shows it was blue paint. Exhibit 2 of Close Out Report.

3. EPA Question:

EPA was told that some kind of sealant would be applied on top of the brick. Did that occur and if so please provide a summary explanation of what was done?

Answer:

No post-abatement coating work has yet been performed on the Phase I areas. Post-abatement coating, either with a brick sealant, paint or other coating is

outside the scope of the IPWP and RBDA. Rainier Commons cannot make any long term maintenance, restoration, or aesthetic plan for the abated surfaces until EPA provides its formal acceptance of the reports confirming clearance of the abated surfaces. After written approval of the abatement work, Rainier Commons will make its determinations regarding any follow-up aesthetic work be it a natural brick look sealant, other coating, or combination thereof. The abated areas are all Low Occupancy Areas, pursuant to 40 C.F.R. 761.3. Rainier Commons remediated all areas to well below the unrestricted Low Occupancy Area standard, ≤25 ppm, and in almost all cases (only two substrate samples within a few hundredth of the High Occupancy 1 ppm at 1.1 ppm and 1.6 ppm) to below the unrestricted High Occupancy standard[1], when not achieving outright non-

[1] *High occupancy area* means any area where PCB remediation waste has been disposed of on-site and where occupancy for any individual not wearing dermal and respiratory protection for a calendar year is: 840 hours or more (an average of 16.8 hours or more per week) for non-porous surfaces and 335 hours or more (an average of 6.7 hours or more per week) for bulk PCB remediation waste. Examples could include a residence, school, day care center, sleeping quarters, a single or multiple occupancy 40 hours per week work station, a school class room, a cafeteria in an industrial facility, a control room, and a work station at an assembly line. 40 C.F.R. 761.3

Low occupancy area means any area where PCB remediation waste has been disposed of on-site and where occupancy for any individual not wearing dermal and respiratory protection for a calendar year is: less than 840 hours (an average of 16.8 hours per week) for non-porous surfaces and less than 335 hours (an average of 6.7 hours per week) for bulk PCB remediation waste. Examples could include an electrical substation or a location in an industrial facility where a worker spends small amounts of time per week (such as an unoccupied area outside a building, an electrical equipment vault, or in the non-office space in a warehouse where occupancy is transitory). 40 C.F.R. 761.3

(i) *Bulk PCB remediation waste*. Bulk PCB remediation waste includes, but is not limited to, the following non-liquid PCB remediation waste: soil, sediments, dredged materials, muds, PCB sewage sludge, and industrial sludge [porous-surface waste utilizes these standards as well].

(A) High occupancy areas. The cleanup level for bulk PCB remediation waste in high occupancy areas is ≤1 ppm without further conditions. High occupancy areas where bulk PCB remediation waste remains at concentrations >1 ppm and ≤10 ppm shall be covered with a cap meeting the requirements of paragraphs (a)(7) and (a)(8) of this section.

(B) Low occupancy areas.

(1) The cleanup level for bulk PCB remediation waste in low occupancy areas is ≤25 ppm unless otherwise specified in this paragraph.

(2) Bulk PCB remediation wastes may remain at a cleanup site at concentrations >25 ppm and ≤50 ppm if the site is secured by a fence and marked with a sign including the ML mark.

(3) Bulk PCB remediation wastes may remain at a cleanup site at concentrations >25 ppm and ≤100 ppm if the site is covered with a cap meeting the requirements of paragraphs (a)(7) and (a)(8) of this section. 40.C.F.R. 761.61

detect results. Moreover, the abated areas are solid, vertical surfaces, unlike soil or other mobile media to which these standards also apply.

4. EPA Question:

All aqueous results in the catch basins were above the KC discharge limit. What if anything was done to address this?

Answer:

The statement within this question does not appear to be correct, based upon the laboratory sampling data. Of the 12 aqueous samples collected from catch basins and/or manholes discussed in the Phase One Close-Out Report, 6 samples returned lab results with non-detectable levels of PCBs. The remaining 6 samples report PCB levels exceeding the Screening Limit of 0.1 ug/L. The Screening Level applied at this campus was established as the laboratory testing procedure's Method Detection Limit (MDL). The logic for this decision is to have the Screening level act as an "early warning indicator" of possible changes to our Site Source Control processes. Each Screening Level exceedance did trigger an immediate evaluation and review of our Site Source Control procedures, to ensure Best Management Practices were in place and fully utilized.

These Screening Level exceedances were reported to the EPA via email, along with corrective action steps to prevent future exceedances. Examples of these notifications are attached for your ease of reference.

5. EPA Question:

Explain the 13.2 ug/100cm2 result on the windowsill in building 11-200 on January 24, 2015 and any procedures taken afterwards.

Answer:

Background levels of PCBs in dust vary at Rainier Commons as documented by EPA and Department of Health. While no evidence of an actual breach of containment could be correlated with that sample and months had passed between cessation of abatement work and EPA's collection of the sample, Rainier Commons treated the area as a "spill". 40 CFR 761.125(b)(1)(i) provides decontamination requirements for low-concentration spills of PCBs. This section states that solid surfaces must be double washed/rinsed (as defined by 40 CFR 761.123). If the area is an indoor, residential surface, it must be cleaned to 10ug/100cm2. Building 11-200 is not a residential space.

Nonetheless, on January 23, 2015, the window sills in unit 11-200 received a double wash/rinse, thus complying with 40 CFR 761.125 decontamination requirements. Field notes for this date are included in the Field Notes section of

the Close-Out report. A copy has been attached to this response, for your ease of reference.

We trust this correspondence and the attachments address the questions presented and that EPA's approval of the Phase I IPWP Close Out Report will be forthcoming shortly.

Very truly yours,

RYAN, SWANSON & CLEVELAND, PLLC

Jo M. Flannery
Attorney Of Counsel

JMF:rw
Enclosure
cc: Alex Fidis, EPA Regional Counsel

Rainier Commons LLC

Catch Basin Sampling Source Control Action Report

September 5th, 2014

Michelle Mullin, EPA Project Manager:

Pursuant to Condition 6 of the Work Plan approval for the exterior paint abatement work at Rainier Commons and the corresponding Catch Basin Sampling Plan in the IPWP for the Phase I work, and as requested in your August 13, 2014 email, we commissioned NVL Labs to collect additional samples of sediment and water during blasting operations. The sample results and reports are attached.

The sample results exceed our action trigger for PCBs at 0.1 µg/L for aqueous samples and 1 ppm for sediments.

Upon receipt of the samples, Rainier Commons initiated an immediate review and inspection of the site's containment enclosures. The containment enclosures were found to be sealed in all respects and were performing.

Manometer monitoring, analytical air sampling, particulate monitoring, and daily ongoing oversight inspections all indicate that materials in catch basin samples are not escaped blasting media.

There have been no signs of visible dust emanating from either enclosure, no observed track-outs of any kind, and proper decontamination procedures and facilities are in place and properly used. Notwithstanding the above, and in addition to our regular source control activities, Rainier Commons undertook and is undertaking the following additional steps in response to the sampling results.

Recent actions taken include:

1. Catch Basin 15 and Manhole 8 located in the Courtyard, which flow into Manhole 6 were cleaned on September 4th, 2014 (Exhibit B).

2. Cleaning CB2, CB3 and CB4 from sediments and water is scheduled for Monday, September 8th, 2014. CB2 and CB4 flow into CB3.

3. Replacing all existing filter socks on the west side including the secondary layer is scheduled for next week. The following CB included: CB1, CB2, CB3 and CB4(on September 4th we replaced secondary layer).

4. Installing new "Catch All" for CB1 and CB2. (Exhibit C)

5. The mislabeling of CB12 on MSI reports was acknowledge by MSI and will be reflect on new reports starting the week of August 18th, 2014. (Exhibit D)

6. Continuing to inspect, maintain, adjusted and/or replace filter socks in each catch basin as well as on roof drains. Done on a weekly basis or/and as needed.

7. Clean up of the premises by visual inspection for debris including detached paint chips via shop vacuum and hand collection. In addition to our weekly power sweep by MSI trucks including the court yard area.

8. Shop vac courtyard/breezeway area with HEPA filter and continue collecting paint chips by hand as well on a weekly basis.

Vered Mizrahi
Rainier Commons LLC

From: Vered <Vered@arieldevelopment.com>
To: Mullin, Michelle <Mullin.Michelle@epa.gov>
Subject: Phase I - Follow up Catch Basin Report
Date: Fri, Oct 10, 2014 3:16 pm
Attachments: Enhanced Site Source Control Actions 10.10.14.pdf (237K),
RC Catch Basin Sampling- IPWP1 Follow Up Phase 10.10.14.pdf (1167K)

Michelle,
Attached is the follow up catch basin sampling report and a summary of additional site source control work. We are planning to collect one more follow up sample after the next solid rain as all of the site source control work had not been fully carried out prior to this last round of sampling and the amount of water in the Manhole 6 was not much. We will provide that follow up sampling result to you as well. We are very interested to see if the additional work was effective as it appears that it is inputs to Manhole 6 that are at issue. Catch basin 3 is non-detect.

Thank you,

Vered Mizrahi
Rainier Commons LLC
918 S. Horton Street, Suite 1018 | Seattle, WA 98134
C: (206) 948-2821 | **T:** (206) 447-0263 | **F:** (206) 447-0299
vered@arieldevelopment.com | www.arieldevelopment.com

Enhanced Site Source Control Actions

October 10, 2014

A focus on roofs as areas that would benefit from additional site source control measures where they contain direct inputs to the stormwater collection system resulted in the following additional actions. Beginning September 15, 2014, a four-man crew has worked nearly full time performing additional Site Source Control activities, including:

- Multiple rounds of cleaning and vacuuming on the roofs of Buildings 24, 1, 2, 3, 26, 5A, 22, 25, 6, 7, 18, 9, 14, and 15.
- Installed/replaced roof drain filters on all roofs cleaned
- Ongoing change-out of roof filters, daily, during rain events
- Multiple cycles of hand vacuuming the parking lot and courtyard with hepa-filter vacuums
- Catch Basins 1-4 cleaned of sediments on September 8, 2014 and September 25, 2014
- Hand removal and disposal of flaking paint from accessible areas of exterior walls

The above actions represent the expenditure of approximately 450 additional man-hours (since September 15th) above our baseline Source Control activities.

July 19, 2018

Mr. Doug Lansing

Rainier Commons
918 S. Horton Street, Suite 101
Seattle, WA 98134

Re: **NVL Batch 1813540.00**

Project Name/Number: N-A

Project location: 3100 Airport Way S. Seattle, WA 98021

Dear Mr. Lansing,

Enclosed please find test results for samples submitted to our laboratory for analysis. Preparation and analysis of these samples were conducted in accordance with published industry standards and methods specified on the attached analytical report.

The content of this package consists of the following:

-Case Narrative & Definition of Data Qualifiers
-Analytical Test Results
-Applicable QC Summary
-Client Chain-of-Custody (CoC)
-NVL Receiving Record

The report is considered highly confidential and will not be released without your approval. Samples are archived for two weeks following analysis. Samples that are not retrieved by the client will be discarded after two weeks.

Thank you for using our laboratory services. If you need further assistance, please contact us at 206-547-0100 or 1-888-NVLLABS.

Sincerely,

Nick Ly, Technical Director

Enclosure: Sample Results

Case Narrative:

The following summarizes samples received on date as shown on the accompanied Chain of custody by NVL Laboratories, Inc. from Rainier Commons, LLC for Project Location 3100 Airport Way S. Seattle, WA 98021. Samples were logged in for PCB analysis per client request using both customer sample ID's and laboratory assigned ID's as listed on the Chain-of-Custody (CoC). All samples as received were processed and analyzed within specified turnaround time without any abnormalities and deviations that may affect the analytical results. All quality control requirements were acceptable unless stated otherwise. The conditions of all samples were acceptable at time of receipt and all samples submitted with this batch were analyzed unless stated otherwise on the CoC.

Test Results are reported based on dry weight in micrograms per kilograms (mg/kg) for PCB samples as shown on the analytical reports.

NVL Laboratories, Inc.
4708 Aurora Ave N, Seattle, WA 98103
p 206.547.0100 | f 206.634.1936 | www.nvllabs.com

Definition Appendix

Terms

% Rec	Percent recovery.
<	Below Reporting Limit(RL) or Limit of Quantitation(LoQ) of the instrument.
B	Blank contamination. The recorded results is associated with a contaminated blank.
DF	Dilution Factor
J	The reported concentration is an estimated value because something may be present in the sample that interfered with the analysis.
J1	The reported concentration is an estimated value because the laboratory control sample (LCS) is out of control limits.
J2	The reported concentration is an estimated value because the percent recovery for matrix spike is out of control limits.
J3	The reported concentration is an estimated value because the relative percent difference(RPD) for duplicate analysis is out of control limits.
J4	Percent recovery is outside of established control limits.
LCS	Laboratory Control Sample.
LFS	Laboratory Fortified Spike
Limits	The upper and lower control limits for spike recoveries.
LN	Quality control sample is outside of control limits. This analyte was not detected in the sample.
LOQ	Limit of quantitation(same as RL)
mg/kg	Milligrams per kilogram.
ND	Analyte not detected or below the reporting limit of the instrument or methodology

RCLLC 0006888

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Definition Appendix

Terms

PPM	Parts per Million.
QC Batch Group	Quality Control Batch Group. The entity that links analytical results and supporting quality control results.
R	The data are not reliable due to possible contamination or loss of material during preparation or analysis. Re-sampling and reanalysis are necessary for verification.
RL	Reporting Limit. The minimum concentration that can be quantified under routine operating conditions.
RPD	Relative Percent Difference. The relative difference between duplicate results(matrix spike, blank spike, or samples duplicate) expressed as a percentage.
RPD Limit	The maximum RPD allowed for a set of duplicate measurements(see RPD).
SMI	Surrogate has matrix interference.
Spike Conc.	The measured concentration, in sample basis units, of a spiked sample.
SURR-ND	Surrogate was not detected due to matrix interference or dilution.
ug/m3	Micrograms per cubic meter.
ug/mL	Micrograms per milliliter
mg/Kg	milligram per kilogram

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ANALYSIS REPORT

Polychlorinated Biphenyls by Gas Chromatography

Client	**Rainier Commons**	Samples Received*	**1**
SDG Number	**1813540.00**	Analyzed By	**Aaron Brown**
Date Reported	**07/19/2018**	Samples Analyzed*	**1**
Project Number	**N-A**	Analysis Method	**8082A**
Location	**3100 Airport Way S. Seattle, WA 98021**	Preparation Method	**3546PR (PCB)**

* for this test only

Sample Number	**71718-DL-PCB**	Received	07/17/2018
Lab Sample ID	18069580	Matrix	Material
Initial Sample Size	2.049 gm	Units of Result	mg/Kg, as received

Analyte	RL	Final Result	Analysis Date
Aroclor-1016	0.98	< 0.98	07/17/2018
Aroclor-1221	0.98	< 0.98	07/17/2018
Aroclor-1232	0.98	< 0.98	07/17/2018
Aroclor-1242	0.98	< 0.98	07/17/2018
Aroclor-1248	0.98	< 0.98	07/17/2018
Aroclor-1254	0.98	< 0.98	07/17/2018
Aroclor-1260	0.98	< 0.98	07/17/2018
PCBs, Total	**0.98**	**<0.98**	

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Quality Control Results

Project Number:	**N-A**	**SDG Number:**	**1813540**
		Project Manager:	**Doug Lansing**
QC Batch(es):	**Q786**	Analysis Method:	**8082A**
QC Batch Method:	3546PR (PCB)	Analysis Description:	Polychlorinated Biphenyls by Gas Chromatography
Preparation Date:	07/17/2018		

Blank: MBLK-1813540

Analyte	Blank Result	Units	DF	RL	Control Limit	Qualifiers
Aroclor-1016	ND	mg/Kg	1	1.0	1	
Aroclor-1221	ND	mg/Kg	1	1.0	1	
Aroclor-1232	ND	mg/Kg	1	1.0	1	
Aroclor-1242	ND	mg/Kg	1	1.0	1	
Aroclor-1248	ND	mg/Kg	1	1.0	1	
Aroclor-1254	ND	mg/Kg	1	1.0	1	
Aroclor-1260	ND	mg/Kg	1	1.0	1	
PCBs, Total	ND	mg/Kg	1	1.0	1	
Surrogates:				% Rec		
Tetrachloro-m-xylene			1	117	40-140	
Decachlorobiphenyl			1	113	40-140	

Lab Control Sample: LCS-1254-1813540

Analyte	Blank Spike Result	Units	DF	Spike Conc.	% Rec	% Rec Limits	Qualifiers
Aroclor-1254	14.6	mg/Kg	1	20.0	73	40-140	
Surrogates:							
Tetrachloro-m-xylene			1		110	40-140	
Decachlorobiphenyl			1		75	40-140	

Lab Control Sample: LCS-1016+1260-1813540
Lab Control Sample Duplicate: LCS Dup-1813540

Analyte	Blank Spike Result	Units	DF	Spike Conc.	% Rec	Limits	RPD	RPD Limit	Qualifiers
Aroclor-1260	15.8	mg/Kg	1	20.0	79	40-140			
	18.3			20.0	91	40-140	15	50	
Surrogates:									
Tetrachloro-m-xylene			1		83	40-140			
					77	40-140			
Decachlorobiphenyl			1		77	40-140			
					97	40-140			

RCLLC 0006891

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Surrogate Recovery Summary Report

Client Rainier Commons **SDG Number** 1813540

Project N-A

Customer Sample ID	Lab Sample ID	Analyte	Recovery	Limits
71718-DL-PCB	18069580	Decachlorobiphenyl	54%	40-140
71718-DL-PCB	18069580	Tetrachloro-m-xylene	43%	40-140
LCS Dup-1813540	LCS Dup-1813540	Decachlorobiphenyl	97%	40-140
LCS Dup-1813540	LCS Dup-1813540	Tetrachloro-m-xylene	77%	40-140
LCS-1016+1260-1813540	LCS-1016+1260-1813540	Decachlorobiphenyl	77%	40-140
LCS-1016+1260-1813540	LCS-1016+1260-1813540	Tetrachloro-m-xylene	83%	40-140
LCS-1254-1813540	LCS-1254-1813540	Decachlorobiphenyl	75%	40-140
LCS-1254-1813540	LCS-1254-1813540	Tetrachloro-m-xylene	110%	40-140
MBLK-1813540	MBLK-1813540	Decachlorobiphenyl	113%	40-140
MBLK-1813540	MBLK-1813540	Tetrachloro-m-xylene	117%	40-140

* Recovery outside limits

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

SDG No: **1813540** Contract:

Determination: **8082 PCB Aroclors <Material>**

Run	Sample	Source	Analyzed	Analyte	True	Found	Unit	% Rec	Limits
R000779	CCV1 1016-1260	PCB_2017-1-2	07/17/2018	Aroclor-1016	5	5	ug/mL	100	80-120
		PCB_2017-1-2	07/17/2018	Aroclor-1260	5	5	ug/mL	100	80-120
	CCV1 1254	PCB_2017-1-3	07/17/2018	Aroclor-1254	5	5	ug/mL	100	80-120
	ICV 1016-1254-1260	PCB_2017-1-4	07/17/2018	Aroclor-1016	5	5.609	ug/mL	112	85-115
		PCB_2017-1-4	07/17/2018	Aroclor-1254	5	5.643	ug/mL	113	85-115
		PCB_2017-1-4	07/17/2018	Aroclor-1260	5	5.666	ug/mL	113	85-115
	CCV2 1016-1260	PCB_2017-1-2	07/17/2018	Aroclor-1016	5	5.671	ug/mL	113	80-120
		PCB_2017-1-2	07/17/2018	Aroclor-1260	5	5.958	ug/mL	119	80-120
	CCV2 1254	PCB_2017-1-3	07/17/2018	Aroclor-1254	5	5.97	ug/mL	119	80-120

% Rec = Percent recovery

* = Percent recovery not within control limits

ORGANICS LABORATORY SERVICES

NVL LABS

Company	Rainier Commons, LLC	**NVL Batch Number**	**1813540.00**
Address	918 S. Horton Street, Suite 101 Seattle, WA 98134	**TAT**	2 Days **AH** No
		Rush TAT	
Project Manager	Mr. Doug Lansing	**Due Date**	7/19/2018 **Time** 2:25 PM
Phone	(206) 447-0263	**Email**	lansinghomes@aol.com
Cell	(206) 963-6656	**Fax**	(206) 447-0299

Project Name/Number: N-A **Project Location:** Same

Subcategory Quantitative analysis

Item Code ORG-05 **Method** 8082 PCB Aroclors <Bulk>

Total Number of Samples 1 Rush Samples

	Lab ID	Sample ID	Description	A/R
1	18069580	71718-DL-PCB		A

	Print Name	Signature	Company	Date	Time
Sampled by	Client				
Relinquished by	Client				

Office Use Only	Print Name	Signature	Company	Date	Time
Received by	Sunny Joshi		NVL	7/17/18	1425
Analyzed by	Ann Bom		NVL	7/18/18	13:00
Results Called by					
☐ **Faxed** ☐ **Emailed**					

Special Instructions:

Entered By: Sunny Joshi Date: 7/17/2018 Time: 2:26 PM 1 of 1

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1813540

NVL Laboratories, Inc.
4708 Aurora Ave N, Seattle, WA 98103
Tel: 206.547.0100 Emerg.Pager: 206.344.1878
Fax: 206.634.1936 1.888.NVL.LABS (685.5227)

CHAIN of CUSTODY SAMPLE LOG

NVL LABS

Client RAINIER COMMONS
Street 3100 AIRPORT WAY S. SEATTLE, WA 98021
Project Manager DOUG LANSING
Project Location SAME

NVL Batch Number
Client Job Number
Total Samples ONE
Turn Around Time ☐ 1-Hr ☐ 24-Hrs ☐ 4 Days ☐ 2-Hrs ☒ 2 Days ☐ 5 Days ☐ 4-Hrs ☐ 3 Days ☐ 6 to 10 Days
Please call for TAT less than 24 Hrs

Phone: 206·963·6656 Fax: Home
Email address DOUGLASPLANSING@HOTMAIL.COM

☐ Asbestos Air	☐ PCM (NIOSH 7400)	☐ TEM (NIOSH 7402)	☐ TEM (AHERA)	☐ TEM (EPA Level II)	☐ Other	
☐ Asbestos Bulk	☐ PLM (EPA/600/R-93/116)	☐ PLM (EPA Point Count)	☐ PLM (EPA Gravimetry)	☐ TEM Bulk		

METALS	Det. Limit	Matrix		RCRA Metals		Other Metals
☐ Total Metals	☐ ppm (AAS)	☐ Air Filter	☐ Paint Chips	☐ Arsenic (As)	☐ All 8	☐ All 3
☐ TCLP	☐ ppb (GFAA)	☐ Drinking water	☐ Paint Chips (Area)	☐ Barium (Ba)	☐ Lead (Pb)	☐ Copper (Cu)
		☐ Dust/wipe	☐ Waste Water	☐ Cadmium (Cd)	☐ Mercury (Hg)	☐ Nickel (Ni)
		☐ Soil		☐ Chromium (Cr)	☐ Selenium (Se)	☐ Zinc (Zn)
					☐ Silver (Ag)	

☒ Other Types of Analysis	☐ Fiberglass ☐ Silica	☐ Nuisance Dust ☐ Respirable Dust	☒ Other (Specify)	PCB BULK

Condition of Package: ☐ Good ☐ Damaged (no spillage) ☐ Severe damage (spillage)

Seq. #	Lab ID	Client Sample Number	Comments	A/R
1		7171B-DL-PCB	BUILDING 11 CONCRETE SUBSTRATE	
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				

	Print Below	Sign Below	Company	Date	Time
Sampled by	D. LANSING		R.C.	7/17/18	1210
Relinquished by	YOUNG		R.C.	7/17/18	2:20
Received by	Sunny J		NVL	7.17.18	2:25
Analyzed by	Anne Brown		NVL	7/18/18	13:00
Results Called by					
Results Faxed by					

Special Instructions: Unless requested in writing, all samples will be disposed of two (2) weeks after analysis.

RCLLC 0006895

Rainier Commons Exterior Paint Removal Project

Daily Observations & Activity Report

(Note Date, Report # and Page #on each sheet)

Date: 1-23-15 Daily Report #: PHASE ONE

Notes on Daily Observations and Activities

0930 MOYAD AND CREW (A-ONE GLASS) ARRIVED ON-SITE AND BEGAN REMOVED THE INTERIOR "SOUND-PROOFING" WINDOWS IN UNIT 11-200.

1000 DAVE (NVL LABS) ARRIVED ON-SITE TO OBTAIN WIPES SAMPLES FROM THE WINDOW SILLS IN UNIT 11-200. NOTE: PREVIOUS WIPE SAMPLES INDICATED THE PRESENSE OF PCBs AT A QUANTITY SLIGHLY HIGER THAN 10 ug/100^2.

1005 DAVE WITNESSED THE UNDERSIGNED PERFORMING A REGULATORY "DOUBLE WASH/RINSE" CLEANING UTILIZING ISOPROPYL ALCOHOL, A NEW, UNUSED FIBER BRISTLE BRUSH, AND CLEAN TERRY TOWELS. TOWELS WERE CHANGED BETWEEN EACH WASH/RINSE CYCLE.

1030 DAVE OBTAINED ONE WIPE SAMPLE FROM EACH SILL.

1110 MOYAD BEGAN RE-INSTALLATION OF WINDOWS.

INSPECTOR

1120 ALL MATERIALS USED FOR CLEANING WERE DISPOSED OF IN ON-SITE HAZ-MAT STORAGE BOX.

Signature 1-23-15 **Date**

Daily Observation / Activity Report (Version 1) (6-11-14) Page 1 of 1

- Include reasons for non-satisfactory responses noted in Daily Inspection Checklist
- If referring to any item from Daily Inspection Checklist, give row #
- Submit Daily Inspection Checklist and Daily Observations/Activity Report along with sample submission and data sheets to NVL Labs

3600 Fremont Ave. N.
Seattle, WA 98103
T: (206) 352-3790
F: (206) 352-7178
info@fremontanalytical.com

Construction Group Int'l LLC
Mark Marcell
19407 144th Ave NE, Building D
Woodenville, WA 98072

RE: Rainier Commons
Lab ID: 1409354

October 06, 2014

Attention Mark Marcell:

Fremont Analytical, Inc. received 1 sample(s) on 9/30/2014 for the analyses presented in the following report.

Mercury (SW7470) with TCLP Extraction (EPA 1311)
Metals (SW6020) with TCLP Extraction (EPA 1311)
Polychlorinated Biphenyls (PCB) by EPA 8082

This report consists of the following:

- Case Narrative
- Analytical Results
- Applicable Quality Control Summary Reports
- Chain of Custody

All analyses were performed consistent with the Quality Assurance program of Fremont Analytical, Inc. Please contact the laboratory if you should have any questions about the results.

Thank you for using Fremont Analytical.

Sincerely,

Chelsea Ward
Project Manager

RCLLC 0006897

Date: *10/06/2014*

CLIENT: Construction Group Int'l LLC
Project: Rainier Commons
Lab Order: 1409354

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Date/Time Collected	Date/Time Received
1409354-001	Blasting Media	09/30/2014 10:30 AM	09/30/2014 11:25 AM

Note: If no "Time Collected" is supplied, a default of 12:00AM is assigned

Case Narrative

WO#: **1409354**
Date: **10/6/2014**

CLIENT: Construction Group Int'l LLC
Project: Rainier Commons

I. SAMPLE RECEIPT:
Samples receipt information is recorded on the attached Sample Receipt Checklist.

II. GENERAL REPORTING COMMENTS:
Results are reported on a wet weight basis unless dry-weight correction is denoted in the units field on the analytical report ("mg/kg-dry" or "ug/kg-dry").

Matrix Spike (MS) and MS Duplicate (MSD) samples are tested from an analytical batch of "like" matrix to check for possible matrix effect. The MS and MSD will provide site specific matrix data only for those samples which are spiked by the laboratory. The sample chosen for spike purposes may or may not have been a sample submitted in this sample delivery group. The validity of the analytical procedures for which data is reported in this analytical report is determined by the Laboratory Control Sample (LCS) and the Method Blank (MB). The LCS and the MB are processed with the samples and the MS/MSD to ensure method criteria are achieved throughout the entire analytical process.

III. ANALYSES AND EXCEPTIONS:
Exceptions associated with this report will be footnoted in the analytical results page(s) or the quality control summary page(s) and/or noted below.

Analytical Report

WO#: **1409354**
Date Reported: **10/6/2014**

Client: Construction Group Int'l LLC
Collection Date: 9/30/2014 10:30:00 AM
Project: Rainier Commons
Lab ID: 1409354-001
Matrix: Solid
Client Sample ID: **Blasting Media**

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Polychlorinated Biphenyls (PCB) by EPA 8082				Batch ID: 8934		Analyst: NG
Aroclor 1016	ND	95.5	D	mg/Kg	1000	10/6/2014 9:26:00 AM
Aroclor 1221	ND	95.5	D	mg/Kg	1000	10/6/2014 9:26:00 AM
Aroclor 1232	ND	95.5	D	mg/Kg	1000	10/6/2014 9:26:00 AM
Aroclor 1242	ND	95.5	D	mg/Kg	1000	10/6/2014 9:26:00 AM
Aroclor 1248	ND	95.5	D	mg/Kg	1000	10/6/2014 9:26:00 AM
Aroclor 1254	2,070	95.5	D	mg/Kg	1000	10/6/2014 9:26:00 AM
Aroclor 1260	ND	95.5	D	mg/Kg	1000	10/6/2014 9:26:00 AM
Aroclor 1262	ND	95.5	D	mg/Kg	1000	10/6/2014 9:26:00 AM
Aroclor 1268	ND	95.5	D	mg/Kg	1000	10/6/2014 9:26:00 AM
Surr: Decachlorobiphenyl	121	50.2-159	D	%REC	1000	10/6/2014 9:26:00 AM
Surr: Tetrachloro-m-xylene	116	60.3-134	D	%REC	1000	10/6/2014 9:26:00 AM

NOTES:
Analyte concentration too high for accurate quantitation.

Mercury (SW7470) with TCLP Extraction (EPA 1311)				Batch ID: 8904		Analyst: MW
Mercury	ND	0.00200		mg/L	1	10/2/2014 3:26:36 PM
Metals (SW6020) with TCLP Extraction (EPA 1311)				Batch ID: 8908		Analyst: TN
Arsenic	ND	0.500		mg/L	1	10/2/2014 3:30:38 PM
Barium	ND	5.00		mg/L	1	10/2/2014 3:30:38 PM
Cadmium	ND	0.100		mg/L	1	10/2/2014 3:30:38 PM
Chromium	ND	0.500		mg/L	1	10/2/2014 3:30:38 PM
Lead	1.43	0.500		mg/L	1	10/2/2014 3:30:38 PM
Selenium	ND	1.00		mg/L	1	10/2/2014 3:30:38 PM
Silver	ND	0.100		mg/L	1	10/2/2014 3:30:38 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	D	Dilution was required
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

Work Order: 1409354
CLIENT: Construction Group Int'l LLC
Project: Rainier Commons

QC SUMMARY REPORT

Mercury (SW7470) with TCLP Extraction (EPA 1311)

Sample ID: **MB-8904**	SampType: **MBLK**	Units: **mg/L**	Prep Date: **10/2/2014**	RunNo: **17192**
Client ID: **MBLKS**	Batch ID: **8904**		Analysis Date: **10/2/2014**	SeqNo: **344062**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	ND	0.00200									

Sample ID: **LCS-8904**	SampType: **LCS**	Units: **mg/L**	Prep Date: **10/2/2014**	RunNo: **17192**
Client ID: **LCSS**	Batch ID: **8904**		Analysis Date: **10/2/2014**	SeqNo: **344063**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	2.43	0.00200	2.500	0	97.2	70	130				

Sample ID: **1409322-001EDUP**	SampType: **DUP**	Units: **mg/L**	Prep Date: **10/2/2014**	RunNo: **17192**
Client ID: **BATCH**	Batch ID: **8904**		Analysis Date: **10/2/2014**	SeqNo: **344065**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	ND	0.00200						0		20	

Sample ID: **1409322-001EMS**	SampType: **MS**	Units: **mg/L**	Prep Date: **10/2/2014**	RunNo: **17192**
Client ID: **BATCH**	Batch ID: **8904**		Analysis Date: **10/2/2014**	SeqNo: **344066**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	2.41	0.00200	2.500	0	96.4	70	130				

Sample ID: **1409322-001EMSD**	SampType: **MSD**	Units: **mg/L**	Prep Date: **10/2/2014**	RunNo: **17192**
Client ID: **BATCH**	Batch ID: **8904**		Analysis Date: **10/2/2014**	SeqNo: **344067**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	2.36	0.00200	2.500	0	94.4	70	130	2.410	2.10	30	

Qualifiers:

B	Analyte detected in the associated Method Blank	D	Dilution was required	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

Work Order: 1409354
CLIENT: Construction Group Int'l LLC
Project: Rainier Commons

QC SUMMARY REPORT

Metals (SW6020) with TCLP Extraction (EPA 1311)

Sample ID: **LCS-8908** SampType: **LCS** Units: **mg/L** Prep Date: **10/2/2014** RunNo: **17194**
Client ID: **LCSS** Batch ID: **8908** Analysis Date: **10/2/2014** SeqNo: **344105**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	5.03	0.100	5.000	0	101	65	135				
Barium	5.12	0.500	5.000	0	102	65	135				
Cadmium	0.261	0.200	0.2500	0	104	65	135				
Chromium	4.99	0.100	5.000	0	99.8	65	135				
Lead	2.57	0.200	2.500	0	103	65	135				
Selenium	0.549	0.500	0.5000	0	110	65	135				
Silver	0.255	0.200	0.2500	0	102	65	135				

Sample ID: **1409354-001ADUP** SampType: **DUP** Units: **mg/L** Prep Date: **10/2/2014** RunNo: **17194**
Client ID: **Blasting Media** Batch ID: **8908** Analysis Date: **10/2/2014** SeqNo: **344110**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	0.100						0		30	
Barium	ND	0.500						0		30	
Cadmium	ND	0.200						0		30	
Chromium	ND	0.100						0		30	
Lead	1.43	0.200						1.432	0.0677	30	
Selenium	ND	0.500						0		30	
Silver	ND	0.200						0		30	

Sample ID: **1409354-001AMS** SampType: **MS** Units: **mg/L** Prep Date: **10/2/2014** RunNo: **17194**
Client ID: **Blasting Media** Batch ID: **8908** Analysis Date: **10/2/2014** SeqNo: **344112**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	5.26	0.500	5.000	0.01791	105	65	135				
Barium	5.47	5.00	5.000	0.2753	104	65	135				
Cadmium	0.334	0.100	0.2500	0.05005	114	65	135				
Chromium	5.07	0.500	5.000	0.03380	101	65	135				

Qualifiers:

B	Analyte detected in the associated Method Blank	D	Dilution was required	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

Work Order: 1409354
CLIENT: Construction Group Int'l LLC
Project: Rainier Commons

QC SUMMARY REPORT

Metals (SW6020) with TCLP Extraction (EPA 1311)

Sample ID: **1409354-001AMS**	SampType: **MS**	Units: **mg/L**	Prep Date: **10/2/2014**	RunNo: **17194**
Client ID: **Blasting Media**	Batch ID: **8908**		Analysis Date: **10/2/2014**	SeqNo: **344112**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	3.95	0.500	2.500	1.432	101	65	135				
Selenium	0.572	1.00	0.5000	0	114	65	135				
Silver	0.257	0.100	0.2500	0	103	65	135				

Sample ID: **1409354-001AMSD**	SampType: **MSD**	Units: **mg/L**	Prep Date: **10/2/2014**	RunNo: **17194**
Client ID: **Blasting Media**	Batch ID: **8908**		Analysis Date: **10/2/2014**	SeqNo: **344114**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	5.48	0.500	5.000	0.01791	109	65	135	5.259	4.14	30	
Barium	5.46	5.00	5.000	0.2753	104	65	135	5.472	0.170	30	
Cadmium	0.332	0.100	0.2500	0.05005	113	65	135	0.3338	0.634	30	
Chromium	5.20	0.500	5.000	0.03380	103	65	135	5.069	2.57	30	
Lead	3.84	0.500	2.500	1.432	96.3	65	135	3.949	2.84	30	
Selenium	0.577	1.00	0.5000	0	115	65	135	0		30	
Silver	0.249	0.100	0.2500	0	99.7	65	135	0.2574	3.18	30	

Sample ID: **MB-8901FB**	SampType: **MBLK**	Units: **mg/L**	Prep Date: **10/2/2014**	RunNo: **17194**
Client ID: **MBLKS**	Batch ID: **8908**		Analysis Date: **10/2/2014**	SeqNo: **344119**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	0.100									
Barium	ND	0.500									
Cadmium	ND	0.200									
Chromium	ND	0.100									
Lead	ND	0.200									
Selenium	ND	0.500									
Silver	ND	0.200									

Qualifiers:

B	Analyte detected in the associated Method Blank	D	Dilution was required	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

Work Order: 1409354
CLIENT: Construction Group Int'l LLC
Project: Rainier Commons

QC SUMMARY REPORT

Metals (SW6020) with TCLP Extraction (EPA 1311)

Qualifiers:	B	Analyte detected in the associated Method Blank	D	Dilution was required	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
	R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

Work Order: 1409354
CLIENT: Construction Group Int'l LLC
Project: Rainier Commons

QC SUMMARY REPORT

Polychlorinated Biphenyls (PCB) by EPA 8082

Sample ID: **PCB CCV 1254**	SampType: **CCV**	Units: **mg/Kg**	Prep Date: **10/6/2014**	RunNo: **17231**
Client ID: **CCV**	Batch ID: **8934**		Analysis Date: **10/6/2014**	SeqNo: **344991**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1254	1.14	0.100	1.000	0	114	80	120				
Surr: Decachlorobiphenyl	52.7		50.00		105	50.2	159				
Surr: Tetrachloro-m-xylene	47.1		50.00		94.2	60.3	134				

Sample ID: **1409354-001ADUP**	SampType: **DUP**	Units: **mg/Kg**	Prep Date: **10/3/2014**	RunNo: **17231**
Client ID: **Blasting Media**	Batch ID: **8934**		Analysis Date: **10/6/2014**	SeqNo: **344993**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016	ND	94.1						0		30	D
Aroclor 1221	ND	94.1						0		30	D
Aroclor 1232	ND	94.1						0		30	D
Aroclor 1242	ND	94.1						0		30	D
Aroclor 1248	ND	94.1						0		30	D
Aroclor 1254	2,520	94.1						2,067	19.9	30	D
Aroclor 1260	ND	94.1						0		30	D
Aroclor 1262	ND	94.1						0		30	D
Aroclor 1268	ND	94.1						0		30	D
Surr: Decachlorobiphenyl	58,000		47,040		123	50.2	159		0		D
Surr: Tetrachloro-m-xylene	52,200		47,040		111	60.3	134		0		D

NOTES:
Analyte concentration too high for accurate quantitation.

Sample ID: **PCB CCV 1254**	SampType: **CCV**	Units: **mg/Kg**	Prep Date: **10/6/2014**	RunNo: **17231**
Client ID: **CCV**	Batch ID: **8934**		Analysis Date: **10/6/2014**	SeqNo: **344994**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1254	1.14	0.100	1.000	0	114	80	120				
Surr: Decachlorobiphenyl	53.4		50.00		107	50.2	159				

Qualifiers:

B	Analyte detected in the associated Method Blank	D	Dilution was required	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

Work Order: 1409354
CLIENT: Construction Group Int'l LLC
Project: Rainier Commons

QC SUMMARY REPORT

Polychlorinated Biphenyls (PCB) by EPA 8082

Sample ID: **PCB CCV 1254**	SampType: **CCV**			Units: **mg/Kg**		Prep Date: **10/6/2014**		RunNo: **17231**		
Client ID: **CCV**	Batch ID: **8934**					Analysis Date: **10/6/2014**		SeqNo: **344994**		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Surr: Tetrachloro-m-xylene	46.8		50.00		93.5	60.3	134				

Sample ID: **MB-8934**	SampType: **MBLK**			Units: **mg/Kg**		Prep Date: **10/3/2014**		RunNo: **17231**		
Client ID: **MBLKS**	Batch ID: **8934**					Analysis Date: **10/3/2014**		SeqNo: **345053**		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016	ND	0.100									
Aroclor 1221	ND	0.100									
Aroclor 1232	ND	0.100									
Aroclor 1242	ND	0.100									
Aroclor 1248	ND	0.100									
Aroclor 1254	ND	0.100									
Aroclor 1260	ND	0.100									
Aroclor 1262	ND	0.100									
Aroclor 1268	ND	0.100									
Surr: Decachlorobiphenyl	58.1		50.00		116	50.2	159				
Surr: Tetrachloro-m-xylene	55.9		50.00		112	60.3	134				

Sample ID: **LCS-8934**	SampType: **LCS**			Units: **mg/Kg**		Prep Date: **10/3/2014**		RunNo: **17231**		
Client ID: **LCSS**	Batch ID: **8934**					Analysis Date: **10/3/2014**		SeqNo: **345054**		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016	1.05	0.100	1.000	0	105	45.8	133				
Aroclor 1260	1.03	0.100	1.000	0	103	57	134				
Surr: Decachlorobiphenyl	54.3		50.00		109	50.2	159				
Surr: Tetrachloro-m-xylene	54.5		50.00		109	60.3	134				

Qualifiers:

B	Analyte detected in the associated Method Blank	D	Dilution was required	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

Work Order: 1409354
CLIENT: Construction Group Int'l LLC
Project: Rainier Commons

QC SUMMARY REPORT

Polychlorinated Biphenyls (PCB) by EPA 8082

Sample ID: **1409354-001AMS** SampType: **MS** Units: **mg/Kg** Prep Date: **10/3/2014** RunNo: **17231**
Client ID: **Blasting Media** Batch ID: **8934** Analysis Date: **10/3/2014** SeqNo: **345057**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016	186	0.0931	0.9311	188.5	-316	61.7	139				S
Aroclor 1260	399	0.0931	0.9311	287.2	12,000	63.1	138				S
Surr: Decachlorobiphenyl	198		46.55		425	50.2	159				S
Surr: Tetrachloro-m-xylene	59.7		46.55		128	60.3	134				

NOTES:
S - Outlying surrogate recovery due to matrix interference.
S - Analyte concentration was too high for accurate spike recoveries.

Qualifiers:

B	Analyte detected in the associated Method Blank	D	Dilution was required	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

Sample Log-In Check List

Client Name:	**CGI**	Work Order Number:	**1409354**
Logged by:	**Erica Silva**	Date Received:	**9/30/2014 11:25:00 AM**

Chain of Custody

1.	Is Chain of Custody complete?	Yes ☑	No ☐	Not Present ☐
2.	How was the sample delivered?	Client		

Log In

3.	Coolers are present?	Yes ☐	No ☑	NA ☐
		No cooler present		
4.	Shipping container/cooler in good condition?	Yes ☑	No ☐	
5.	Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	Not Required ☑
6.	Was an attempt made to cool the samples?	Yes ☐	No ☑	NA ☐
		Samples received straight from field		
7.	Were all coolers received at a temperature of >0°C to 10.0°C	Yes ☐	No ☐	NA ☑
8.	Sample(s) in proper container(s)?	Yes ☑	No ☐	
9.	Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
10.	Are samples properly preserved?	Yes ☑	No ☐	
11.	Was preservative added to bottles?	Yes ☐	No ☑	NA ☐
12.	Is the headspace in the VOA vials?	Yes ☐	No ☐	NA ☑
13.	Did all samples containers arrive in good condition(unbroken)?	Yes ☑	No ☐	
14.	Does paperwork match bottle labels?	Yes ☑	No ☐	
15.	Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	
16.	Is it clear what analyses were requested?	Yes ☑	No ☐	
17.	Were all holding times able to be met?	Yes ☑	No ☐	

Special Handling (if applicable)

18.	Was client notified of all discrepancies with this order?	Yes ☐	No ☐	NA ☑

Person Notified: _____ Date: _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

19. Additional remarks:

Client requested TCLP RCRA-8 metals at sample drop-off.

Item Information

Item #	Temp ºC	Condition
Sample	19.4	

RCLLC 0006908

Fremont Analytical

Chain of Custody Record

3600 Fremont Ave N.
Seattle, WA 98103
Tel: 206-352-3790
Fax: 206-352-7178

Date: 9/30/14

Laboratory Project No (internal): 1409354

Page: _____ of _____

Client: CGI
Address: 14256 144th Ave NE
City, State, Zip: Woodinville Tel: 425 487 2618
Reports To (PM): Fax: 425 487 2619

Project Name: Rainier Commons
Location: Seattle
Collected by: Mark Mancell / Doug Lansing
Email: markm@cgi45.net Project No:

*Matrix Codes: A = Air, AQ = Aqueous, B = Bulk, O = Other, P = Product, S = Soil, SD = Sediment, SL = Solid, W = Water, DW = Drinking Water, GW = Ground Water, WW = Waste Water

Sample Name	Sample Date	Sample Time	Sample Type (Matrix)*	VOC (EPA 8260)	GX/BTEX	BTEX	Gasoline Range Organics (GX)	Hydrocarbon Identification (HCID)	Diesel/Heavy Oil Range Organics (DX)	SEMI VOL (EPA 8270)	PAH (EPA 8270 - SIM)	PCBs (EPA 8082)	Metals** (6020 / 200.8) TCLP	Total (T) / Dissolved (D)	Arsenic (As)***	EDB (8011)	Comments/Depth
1 Blasting Media	9/30	10:30	Solid										X				
2 (incl. poly tyvek		am															
3 cardboard)																	
4																	
5																	
6																	
7																	
8																	
9																	
10																	

**Metals Analysis (Circle): MTCA-5 RCRA-8 Priority Pollutants TAL Individual: Ag Al As B Ba Be Ca Cd Co Cr Cu Fe Hg K Mg Mn Mo Na Ni Pb Sb Se Sr Sn Ti Tl U V Zn

***Anions (Circle): Nitrate Nitrite Chloride Sulfate Bromide O-Phosphate Fluoride Nitrate+Nitrite

Special Remarks:

Sample Disposal: ☐ Return to Client ☐ Disposal by Lab (A fee may be assessed if samples are retained after 30 days.)

Relinquished	Date/Time	Received	Date/Time
1		1	
2		2	
3 Mark Mancell		3 Kerri Tyler	9/30/14 11:25

TAT -> SameDay* NextDay* 2 Day 3 Day STD
*Please coordinate with the lab in advance

Distribution: White - Lab, Yellow - File, Pink - Originator

NVL Laboratories, Inc.
4708 Aurora Ave N, Seattle, WA 98103
p 206.547.0100 | f 206.634.1936 | www.nvllabs.com

Analysis Report
Polychlorinated Biphenyls (PCBs)

NVL LABS INDUSTRIAL HYGIENE SERVICES

Client: Rainier Commons, LLC
Address: 918 S. Horton Street, Suite 101
Seattle, WA 98134

Attention: Mr. Doug Lansing
Project Location: 3100 Airport Way S. Seattle,WA 98134

NVL Batch No. 1411580.00
Method No.: EPA 8082
Client Project #: 2012-494
Date Received: 7/9/2014
Matrix: Bulk
Samples Received: 1
Samples Analyzed: 1

Lab Sample ID:	14071725			
Client Sample ID:	7914 DL PCB1			
Sample Description:	Paint Chips removed from Exterior Window frame, Bldg. 13			
Sample Weight (g)	1.1303			
PCB Type	mg/Kg(ppm)			
Aroclor 1016	ND			
Aroclor 1221	ND			
Aroclor 1232	ND			
Aroclor 1242	ND			
Aroclor 1248	ND			
Aroclor 1254	21000.0			
Aroclor 1260	16000.0			
Total: PCB Concentration	37000.0			
Reporting Limit (RL)	1800.0			

Remarks: mg/Kg = Milligrams per kilograms
ppm = Parts per million by weight
ND = None Detected (less than RL)
<RL = Below the reporting limit of instrument

Sampled by: Client
Analyzed by: Evelyn Ahulu
Date: 07/09/2014

DRAFT

Preparation of these samples were conducted in accordance with EPA Method 3546 or other published test methods as noted in this report. Unless stated otherwise, the condition of all samples was acceptable at time of receipt. Reported sample results are based on dry weight and method QC results are acceptable unless stated otherwise. If samples were not collected by NVL personnel, then the accuracy of the results is limited by the methodology and acuity of the sample collector. This report shall not be reproduced except in full, without written approval of NVL Laboratories, Inc.. Responsibility for interpretation of the reported data rests with the client.

RCLLC 0006910

NVL Laboratories, Inc.

4708 Aurora Ave N, Seattle, WA 98103
Tel: 206.547.0100 Emerg.Cell: 206.914.4646
Fax: 206.634.1936 1.888.NVL.LABS (685.5227)

CHAIN of CUSTODY SAMPLE LOG

NVL Batch ID
1411580

Client Rainier Commons, LLC
Street 918 S. Horton Street, Suite 101
Seattle, WA 98134

NVL Batch Number
Client Job Number 2012-494
Total Samples ONE

Turn Around Time ☐ 1-Hr ☐ 2-Hrs ☐ 4-Hrs ☐ 8-Hrs ☐ 12-Hrs ☒ 24-Hrs ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6-10

Please call for TAT less than 24 Hrs

Project Manager Mr. Doug Lansing
Project Location 3100 Airport Way S. Seattle,WA 98134

Email address lansinghomes@aol.com

Phone: (206) 447-0263 **Fax:** (206) 447-0299 **Cell** (206) 963-6656

☐ **Asbestos Air**	☐ PCM (NIOSH 7400)	☐ TEM (NIOSH 7402)	☐ TEM (AHERA)	☐ TEM (EPA Level II)	☐ Other
☐ **Asbestos Bulk**	☐ PLM (EPA/600/R-93/116)	☐ PLM (EPA Point Count)	☐ PLM (EPA Gravimetry)	☐ TEM BULK	
☐ **Mold/Fungus**	☐ Mold Air	☐ Mold Bulk	☐ **Rotometer Calibration**		

METALS	**Det. Limit**	**Matrix**		**RCRA Metals**		**Other Metals**
☐ Total Metals	☐ FAA (ppm	☐ Air Filter	☐ Soil	☐ Arsenic (As)	☐ All 8	☐ **All 3**
☐ TCLP	☐ ICP (ppm)	☐ Drinking water	☐ Paint Chips in %	☐ Barium (Ba)	☐ Chromium (C	☐ Copper (Cu)
☐ Cr 6	☐ GFAA (ppl	☐ Dust/wipe (Area)	☐ Paint Chips in cr	☐ Cadmium (Cd)	☐ Lead (Pb)	☐ Nickel (Ni)
					☐ Mercury (Hg)	☐ Zinc (Zn)

☒ **Other Types of Analysis** ☐ Fiberglass ☐ Silica ☐ Nuisance Dust ☐ Respirable Dust ☒ Other (Specify) PCB-BULK

Condition of Package: ☐ Good ☐ Damaged (no spillage) ☐ Severe damage (spillage)

Seq. #	Lab ID	Client Sample Number	Comments (e.g Sample are, Sample Volume, etc)	A/R
1		7914 DL PCB1	PAINT CHIPS REMOVED FROM EXTERIOR	
2			WINDOW FRAME, BLDG 13.	
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				

	Print Below	Sign Below	Company	Date	Time
Sampled by	LARRY MIDDAUGH		CGI	7/9/14	
Relinquished by	DOUG LANSING		R.C.	7/9/14	
Received by	SHASTA KHAN		NDM	7/9/14	840 AM
Analyzed by					
Results Called by					
Results Faxed by					

Special Instructions: Unless requested in writing, all samples will be disposed of two (2) weeks after analysis.

NVL Laboratories, Inc.
4708 Aurora Ave. N., Seattle, WA 98103
Tel: 206.547.0100, Fax: 206.634.1936
www.nvllabs.com

Analysis Report

AIHA - IH # 101861
WA - DOE # C1765

AIHA Environmental Lead and Industrial Hygiene ACCREDITED LABORATORY

Total Metals

Client: NVL Field Services Division
Address: 4708 Aurora Ave. N.
Seattle, WA 98103

Attention: Mr. Munaf Khan
Project Location: 3317 3rd Ave South, Seattle, WA 98134

Batch #: 1409906.00
Matrix: Bulk
Method: EPA 6010 / 7471 (Hg)
Client Project #: 2012-494
Date Received: 6/13/2014
Samples Received: 1
Samples Analyzed: 1

Lab ID	Client Sample #	Elements	Sample wt (g)	RL mg / kg	Results in mg / kg	Results in ppm
14061273	61114-MG-B-1	Silver (Ag)	0.2362	17.0	< 17.0	< 17.0
		Arsenic (As)	0.2362	17.0	< 17.0	< 17.0
		Cadmium (Cd)	0.2362	17.0	< 17.0	< 17.0
		Chromium (Cr)	0.2362	17.0	27.0	27.0
		Mercury (Hg)	0.2362	0.9	< 0.8	< 0.8
		Lead (Pb)	0.2362	17.0	< 17.0	< 17.0
		Copper (Cu)	0.2362	17.0	2500.0	2500.0
		Nickel (Ni)	0.2362	17.0	26.0	26.0
		Zinc (Zn)	0.2362	17.0	55.0	55.0

Sampled by: Client
Analyzed by: Fatima Khan
Reviewed by: Nick Ly

Date Analyzed: 06/16/2014
Date Issued: 06/16/2014

for Nick Ly, Technical Director

mg/ kg = Milligrams per kilogram
ppm = Parts per million

RL = Reporting Limit
'<' = Below the reporting Limit

Note : Method QC results are acceptable unless stated otherwise.
Unless otherwise indicated, the condition of all samples was acceptable at time of receipt.

Bench Run No: 34-0616-6

NVL Laboratories, Inc.
4708 Aurora Ave N, Seattle, WA 98103
Tel: 206.547.0100 Emerg. Cell: 206.914.4646
1.888.NVL.LABS (685.5227) www.nvllabs.com

CHAIN of CUSTODY SAMPLE LOG

NVL Batch ID
1409906

Client NVL Laboratories Inc
Street 4708 Aurora Ave N
Seattle, WA 98103
Project Manager Munaf Khan
Project Location 3317 3rd Avenue South
Seattle, WA 98134

NVL Batch Number _____
Client Job Number 2012-494
Total Samples 1
Turn Around Time ☐ 1-Hr ☐ 8-Hrs ☐ 2 ☐ 5 ☐ 2-Hrs ☐ 12-Hrs ☐ 3 ☐ 6-10 ☐ 4-Hrs ☑ 24-Hrs ☐ 4
Please call for TAT less than 24 Hrs
Email address _____

Phone: (206) 447-0263 **Fax:** (206) 447-0299

☐ **Asbestos Air**	☐ PCM (NIOSH 7400)	☐ TEM (NIOSH 7402)	☐ TEM (AHERA)	☐ TEM (EPA Level II)	☐ Other
☐ **Asbestos Bulk**	☐ PLM (EPA/600/R-93/116)	☐ PLM (EPA Point Count)	☐ PLM (EPA Gravimetry)	☐ TEM BULK	
☐ **Mold/Fungus**	☐ Mold Air	☐ Mold Bulk	☐ **Rotometer Calibration**		

METALS	**Det. Limit**	**Matrix**		**RCRA Metals**		**Other Metals**
☒ Total Metals	☐ FAA (ppm)	☐ Air Filter	☐ Soil	☑ Arsenic (As)	☐ All 8	☐ **All 3**
☐ TCLP	☒ ICP (ppm)	☐ Drinking water	☒ Paint Chips in %	☐ Barium (Ba)	☒ Chromium (C	☒ Copper (Cu)
☐ Cr 6	☐ GFAA (ppb)	☐ Dust/wipe (Area)	☐ Paint Chips in cr	☒ Cadmium (Cd)	☒ Lead (Pb)	☒ Nickel (Ni)
					☒ Mercury (Hg)	☒ Zinc (Zn)
						☒ SILVER (Ag)

☐ **Other Types of Analysis** ☐ Fiberglass ☐ Nuisance Dust ☐ Other (Specify) _____
☐ Silica ☐ Respirable Dust

Condition of Package: ☐ Good ☐ Damaged (no spillage) ☐ Severe damage (spillage)

Seq. #	Lab ID	Client Sample Number	Comments	A/R
1		61114-MG-B-1	BLASTING MEDIA	
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				

	Print Below	Sign Below	Company	Date	Time
Sampled by	Marcus Gurgen		NVL LABS	6/11/14	14:00
Relinquished by	↓	↓	↓	6/12/14	13:15
Received by	Munista Khan	Brandi Evans	NVL	6/13/14	1315
Analyzed by	Extraction		NVL Labs	6/16/14	11:20a
Results Called by					
Results Faxed by					

Special Instructions: Unless requested in writing, all samples will be disposed of two (2) weeks after analysis.
Results report to

June 17, 2014

NVL LABS
INDUSTRIAL HYGIENE SERVICES
Laboratory | Management | Training

Doug Lansing
Rainier Commons, LLC
918 S. Horton Street, Suite 101
Seattle, WA 98134

RE: Organics Analysis, NVL Batch # 1410074.00

Dear Mr. Lansing,

Enclosed please find test results for the samples submitted to our laboratory for analysis. Preparation and analysis of these samples were conducted for the presence of organic compounds using instruments specified in accordance with EPA, NIOSH and other published methods.

Test results for bulk sample are usually expressed in milligrams per kilogram (mg/Kg) and/or parts per million (ppm). Air samples are usually reported in milligrams per cubic meter (mg/m3). Dust wipe samples are expressed in micrograms per 100 square centimeters (ug/cm2). The reported test results pertain only to items tested and are not blank corrected.

For recent regulation updates pertaining to current regulatory levels or permissable exposure limits, please call your local regulatory agencies for more details.

This report is considered highly confidential and will not be released without your approval. Samples are archived for two weeks following analysis. Samples that are not retrieved by the client are discarded after two weeks.

Thank you for using our laboratory services. Please do not hesitate to call if there is anything further we can assist you with.

Sincerely,

Nick Ly, Technical Director

Enc.: Sample Results

1.888.NVL.LABS
1.888.(685.5227)
www.nvllabs.com

NVL Laboratories, Inc.
4708 Aurora Ave N, Seattle, WA 98103
p 206.547.0100 | f 206.634.1936

NVL Laboratories, Inc.
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p 206.547.0100 | f 206.634.1936 | www.nvllabs.com

Analysis Report
Polychlorinated Biphenyls (PCBs)

NVL LABS INDUSTRIAL HYGIENE SERVICES

Client: Rainier Commons, LLC
Address: 918 S. Horton Street, Suite 101
Seattle, WA 98134

Attention: Mr. Doug Lansing
Project Location: 3100 Airport Way S. Seattle,WA 98134

NVL Batch No. 1410074.00
Method No.: EPA 8082
Client Project #: 2012-494
Date Received: 6/16/2014
Matrix: Bulk
Samples Received: 1
Samples Analyzed: 1

Lab Sample ID:	14062793			
Client Sample ID:	61614DLPCB			
Sample Description:	White Cementious Sample from Bldg. 13, SW Corner			
Sample Weight (g)	0.95012			
PCB Type	mg/Kg(ppm)			
Aroclor 1016	ND			
Aroclor 1221	ND			
Aroclor 1232	ND			
Aroclor 1242	ND			
Aroclor 1248	ND			
Aroclor 1254	8900.0			
Aroclor 1260	5000.0			
Total: PCB Concentration	13900.0			
Reporting Limit (RL)	2100.0			

Remarks: mg/Kg = Milligrams per kilograms
ppm = Parts per million by weight

ND = None Detected (less than RL)
<RL = Below the reporting limit of instrument

Sampled by: Client
Analyzed by: Evelyn Ahulu **Date:** 06/17/2014
Reviewed by: Nick Ly **Date:** 06/17/2014

Nick Ly, Technical Director

Preparation of these samples were conducted in accordance with EPA Method 3546 or other published test methods as noted in this report. Unless stated otherwise, the condition of all samples was acceptable at time of receipt. Reported sample results are based on dry weight and method QC results are acceptable unless stated otherwise. If samples were not collected by NVL personnel, then the accuracy of the results is limited by the methodology and acuity of the sample collector. This report shall not be reproduced except in full, without written approval of NVL Laboratories, Inc.. Responsibility for interpretation of the reported data rests with the client.

NVL Laboratories, Inc.

4708 Aurora Ave N, Seattle, WA 98103
Tel: 206.547.0100 Emerg.Pager: 206.344.1878
Fax: 206.634.1936 1.888.NVL.LABS (685.5227)

CHAIN of CUSTODY SAMPLE LOG

NVL Batch ID 1410074

9185. Horton

Client: RAINIER COMMONS
Street: 3100 AIRPORT WAY S.
SEATTLE, WA 98134
Project Manager: DOUG LANSING
Project Location:

NVL Batch Number:
Client Job Number: 202-444
Total Samples: ONE
Turn Around Time: ☐ 1-Hr ☑ 24-Hrs ☐ 4 Days ☐ 2-Hrs ☐ 2 Days ☐ 5 Days ☐ 4-Hrs ☐ 3 Days ☐ 6 to 10 Days
Please call for TAT less than 24 Hrs
Email address: LANSINGHOMES@ADL.COM

Phone: 206-963-6656 Fax: Home

☐ Asbestos Air	☐ PCM (NIOSH 7400) ☐ TEM (NIOSH 7402) ☐ TEM (AHERA) ☐ TEM (EPA Level II) ☐ Other					
☐ Asbestos Bulk	☐ PLM (EPA/600/R-93/116) ☐ PLM (EPA Point Count) ☐ PLM (EPA Gravimetry) ☐ TEM Bulk					
METALS ☐ Total Metals ☐ TCLP	**Det. Limit** ☐ ppm (AAS) ☐ ppb (GFAA)	**Matrix** ☐ Air Filter ☐ Drinking water ☐ Dust/wipe ☐ Soil ☐ Paint Chips ☐ Paint Chips (Area) ☐ Waste Water	**RCRA Metals** ☐ Arsenic (As) ☐ Barium (Ba) ☐ Cadmium (Cd) ☐ Chromium (Cr) ☐ All 8 ☐ Lead (Pb) ☐ Mercury (Hg) ☐ Selenium (Se) ☐ Silver (Ag)	**Other Metals** ☐ All 3 ☐ Copper (Cu) ☐ Nickel (Ni) ☐ Zinc (Zn)		
☑ Other Types of Analysis	☐ Fiberglass ☐ Silica	☐ Nuisance Dust ☐ Respirable Dust	☑ Other (Specify) PCBs			

Condition of Package: ☐ Good ☐ Damaged (no spillage) ☐ Severe damage (spillage)

Seq. #	Lab ID	Client Sample Number	Comments	A/R
1		61614 DL PCB	WHITE CEMENTIOUS SAMPLE FROM BLDG 13, SW CORNER	
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				

	Print Below	Sign Below	Company	Date	Time
Sampled by	DOUG LANSING		RAINIER COMMONS	6-13	1500
Relinquished by	DOUG LANSING		"	6-16	1615
Received by			NVL	6/16/14	1615 (1658)
Analyzed by	Evelyn Atm		NVL	6/17/14	16:30
Results Called by					
Results Faxed by					

Special Instructions: Unless requested in writing, all samples will be disposed of two (2) weeks after analysis.

NVL Laboratories, Inc.
4708 Aurora Ave N, Seattle, WA 98103
p 206.547.0100 | f 206.634.1936 | www.nvllabs.com

Analysis Report
Polychlorinated Biphenyls (PCBs)

NVL LABS INDUSTRIAL HYGIENE SERVICES

Client: NVL Field Services Division
Address: 4708 Aurora Ave. N.
Seattle, WA 98103

Attention: Mr. Marcus Gladden
Project Location: 3100 Airport Way South Seattle,WA 98134

NVL Batch #: 1418022.00
Method No.: EPA 8082
Client Project #: 2012-494
Date Received: 10/9/2014
Matrix: Bulk
Samples Received: 2
Samples Analyzed: 2

Lab Sample ID:	14128826	14128827		
Client Sample ID:	10914-BULK-1	10914-BULK-2		
Sample Description:	Blue Paint, Bldg. 13 SW	Sandstone, Bldg. 10 W		
Sample Weight (g)	1.0403	2.0156		
PCB Type	mg/Kg(ppm)	mg/Kg(ppm)		
Aroclor 1016	ND	ND		
Aroclor 1221	ND	ND		
Aroclor 1232	ND	ND		
Aroclor 1242	ND	ND		
Aroclor 1248	ND	ND		
Aroclor 1254	100.00	2.8		
Aroclor 1260	29.00	1.5		
Total: PCB Concentration	129.0	4.3		
Reporting Limit (RL)	19.0	1.0		

Remarks: mg/Kg = Milligrams per kilogram
ppm = Parts per million by weight
ND = None Detected (less than RL)
<RL = Below the reporting limit of instrument

Sampled by: Client
Analyzed by: Shalini Patel **Date:** 10/10/2014
Reviewed by: Nick Ly **Date:** 10/10/2014

Nick Ly, Technical Director

RCLLC 0006917

NVL Laboratories, Inc.
4708 Aurora Ave N, Seattle, WA 98103
p 206.547.0100 | f 206.634.1936 | www.nvllabs.com

CHAIN of CUSTODY SAMPLE LOG

1418022

Client NVL Laboratories Inc
Street 4708 Aurora Ave N
Seattle, WA 98103
Project Manager Munaf Khan
Project Location 3100 Airport Way South
Seattle, WA 98134

NVL Batch Number
Client Job Number 2012-494
Total Samples 2
Turn Around Time ☐ 1 Hr ☐ 6 Hrs ☐ 3 ☐ 10 ☐ 2 Hrs ☒ 1 ☐ 4 ☐ 4 Hrs ☐ 2 ☐ 5
Please call for TAT less than 24 Hrs
Email address

Phone: (206) 447-0263 **Fax:** (206) 447-0299

☐ **Asbestos Air**	☐ PCM (NIOSH 7400)	☐ TEM (NIOSH 7402)	☐ TEM (AHERA)	☐ TEM (EPA Level II)	☐ Other
☐ **Asbestos Bulk**	☐ PLM (EPA/600/R-93/116)	☐ PLM (EPA Point Count)	☐ PLM (EPA Gravimetry)	☐ TEM BULK	
☐ **Mold/Fungus**	☐ Mold Air	☐ Mold Bulk	☐ **Rotometer Calibration**		

METALS	**Det. Limit**	**Matrix**		**RCRA Metals**		**Other Metals**
☐ Total Metals	☐ FAA (ppm)	☐ Air Filter	☐ Soil	☐ Arsenic (As)	☐ All 8 / ☐ Chromium (C	☐ **All 3** / ☐ Copper (Cu)
☐ TCLP	☐ ICP (ppm)	☐ Drinking water	☐ Paint Chips in %	☐ Barium (Ba)	☐ Lead (Pb)	☐ Nickel (Ni)
☐ Cr 6	☐ GFAA (ppb)	☐ Dust/wipe (Area)	☐ Paint Chips in cr	☐ Cadmium (Cd)	☐ Mercury (Hg)	☐ Zinc (Zn)

☒ **Other Types of Analysis** ☐ Fiberglass ☐ Nuisance Dust ☒ Other (Specify) PCB's - Bulk
☐ Silica ☐ Respirable Dust

Condition of Package: ☐ Good ☐ Damaged (no spillage) ☐ Severe damage (spillage)

Seq. #	Lab ID	Client Sample Number	Comments	A/R
1		10914-Bulk-1	BLUE PAINT, BLDG 13 SW	
2		↓ 2	SANDSTONE, BLDG 10 W	
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				

	Print Below	Sign Below	Company	Date	Time
Sampled by	MARCUS GLADDEN		NVL LABS	10/9/14	11:30
Relinquished by	↓	↓	↓	↓	14:15
Received by	Midori Kato		NVL	10/9/14	1415
Analyzed by					
Results Called by					
Results Faxed by					

Special Instructions: Unless requested in writing, all samples will be disposed of two (2) weeks after analysis.
Results report to

NVL Laboratories, Inc.
4708 Aurora Ave N, Seattle, WA 98103
p 206.547.0100 | f 206.634.1936 | www.nvllabs.com

Analysis Report
Polychlorinated Biphenyls (PCBs)

NVL LABS INDUSTRIAL HYGIENE SERVICES

Client: Rainier Commons, LLC
Address: 918 S. Horton Street, Suite 101
Seattle, WA 98134

Attention: Mr. Doug Lansing
Project Location: 3100 Airport Way S. Seattle, WA 98134

NVL Batch #: 1418211.00
Method No.: EPA 8082
Client Project #: 2012-494
Date Received: 10/13/2014
Matrix: Bulk
Samples Received: 1
Samples Analyzed: 1

Lab Sample ID:	14129938			
Client Sample ID:	100814DLPCB			
Sample Description:	Silver material on brick			
Sample Weight (g)	2.1487			
PCB Type	mg/Kg(ppm)			
Aroclor 1016	ND			
Aroclor 1221	ND			
Aroclor 1232	ND			
Aroclor 1242	ND			
Aroclor 1248	ND			
Aroclor 1254	5.6			
Aroclor 1260	1.4			
Total: PCB Concentration	7.0			
Reporting Limit (RL)	0.9			

Remarks: mg/Kg = Milligrams per kilogram
ppm = Parts per million by weight
ND = None Detected (less than RL)
<RL = Below the reporting limit of instrument

Sampled by: Client
Analyzed by: Shalini Patel
Date: 10/14/2014

DRAFT

RCLLC 0006919

NVL Laboratories, Inc.
4708 Aurora Ave N, Seattle, WA 98103
Tel: 206.547.0100 Emerg.Cell: 206.914.4646
Fax: 206.634.1936 1.888.NVL.LABS (685.5227)

CHAIN of CUSTODY SAMPLE LOG

1418211

Client Rainier Commons, LLC
Street 918 S. Horton Street, Suite 101
Seattle, WA 98134

NVL Batch Number
Client Job Number 2012-494
Total Samples ONE
Turn Around Time ☐ 1-Hr ☐ 2-Hrs ☐ 4-Hrs ☐ 8-Hrs ☐ 12-Hrs ☒ 24-Hrs ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6-10

Project Manager Mr. Doug Lansing
Project Location 3100 Airport Way S. Seattle,WA 98134

Please call for TAT less than 24 Hrs

Email address lansinghomes@aol.com

Phone: (206) 447-0263 **Fax:** (206) 447-0299 **Cell** (206) 963-6656

☐ Asbestos Air	☐ PCM (NIOSH 7400)	☐ TEM (NIOSH 7402)	☐ TEM (AHERA)	☐ TEM (EPA Level II)	☐ Other
☒ Asbestos Bulk	☐ PLM (EPA/600/R-93/116)	☐ PLM (EPA Point Count)	☐ PLM (EPA Gravimetry)	☐ TEM BULK	
☐ Mold/Fungus	☐ Mold Air	☐ Mold Bulk	☐ Rotometer Calibration		

METALS	Det. Limit	Matrix		RCRA Metals		Other Metals
☐ Total Metals	☐ FAA (ppm	☐ Air Filter	☐ Soil	☐ Arsenic (As)	☐ All 8	☐ All 3
☐ TCLP	☐ ICP (ppm)	☐ Drinking water	☐ Paint Chips in %	☐ Barium (Ba)	☐ Chromium (C	☐ Copper (Cu)
☐ Cr 6	☐ GFAA (ppl	☐ Dust/wipe (Area)	☐ Paint Chips in cr	☐ Cadmium (Cd)	☐ Lead (Pb)	☐ Nickel (Ni)
					☐ Mercury (Hg)	☐ Zinc (Zn)

☐ Other Types of Analysis	☐ Fiberglass ☐ Silica	☐ Nuisance Dust ☐ Respirable Dust	☒ Other (Specify)	PCB

Condition of Package: ☐ Good ☐ Damaged (no spillage) ☐ Severe damage (spillage)

Seq. #	Lab ID	Client Sample Number	Comments (e.g Sample are, Sample Volume, etc)	A/R
1		100814 DL PCB	REMOVED BY HAND FROM SW WALL	
2			BLDG 13. SILVER MATERIAL	
3			ON BRICK	
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				

	Print Below	Sign Below	Company	Date	Time
Sampled by	D. LANSING		R.C.	10/8/14	1510
Relinquished by				10/13/14	14:00
Received by				10/13/14	1400
Analyzed by					
Results Called by					
Results Faxed by					

Special Instructions: Unless requested in writing, all samples will be disposed of two (2) weeks after analysis.

NVL Laboratories, Inc.
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Analysis Report
Polychlorinated Biphenyls (PCBs)

NVL LABS INDUSTRIAL HYGIENE SERVICES

Client: Rainier Commons, LLC
Address: 918 S. Horton Street, Suite 101
Seattle, WA 98134

Attention: Mr. Doug Lansing
Project Location: 3100 Airport Way S. Seattle,WA 98134

NVL Batch No. 1416397.00
Method No.: EPA 8082
Client Project #: 2012-494
Date Received: 9/16/2014
Matrix: Bulk
Samples Received: 1
Samples Analyzed: 1

Lab Sample ID:	14121456			
Client Sample ID:	91614DLPCB1			
Sample Description:	Dust/Dirt found @ South Window Sill-South Window Bldg. 10-300	← 10-300		
Sample Weight (g)	1.4158			
PCB Type	mg/Kg(ppm)			
Aroclor 1016	ND			
Aroclor 1221	ND			
Aroclor 1232	ND			
Aroclor 1242	ND			
Aroclor 1248	ND			
Aroclor 1254	ND			
Aroclor 1260	ND			
Total: PCB Concentration	ND			
Reporting Limit (RL)	1.4			

Remarks: mg/Kg = Milligrams per kilograms
ppm = Parts per million by weight
ND = None Detected (less than RL)
<RL = Below the reporting limit of instrument

Sampled by: Client
Analyzed by: Evelyn Ahulu **Date:** 09/17/2014
Reviewed by: Nick Ly **Date:** 09/17/2014

Nick Ly, Technical Director

Preparation of these samples were conducted in accordance with EPA Method 3546 or other published test methods as noted in this report. Unless stated otherwise, the condition of all samples was acceptable at time of receipt. Reported sample results are based on dry weight and method QC results are acceptable unless stated otherwise. If samples were not collected by NVL personnel, then the accuracy of the results is limited by the methodology and acuity of the sample collector. This report shall not be reproduced except in full, without written approval of NVL Laboratories, Inc.. Responsibility for interpretation of the reported data rests with the client.

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Analysis Report
Polychlorinated Biphenyls (PCBs)

NVL LABS INDUSTRIAL HYGIENE SERVICES

Client: Rainier Commons, LLC
Address: 918 S. Horton Street, Suite 101
Seattle, WA 98134

Attention: Mr. Doug Lansing
Project Location: RC - Airport Way S.

NVL Batch No. 1415402.00
Method No.: EPA 8082
Client Project #: A14067
Date Received: 9/2/2014
Matrix: Bulk
Samples Received: 1
Samples Analyzed: 1

Lab Sample ID:	14116543			
Client Sample ID:	#1 Scaffold Plank Cores	BLDG 13		
Sample Description:	Scaffold plank cores			
Sample Weight (g)	3.2942			
PCB Type	mg/Kg(ppm)			
Aroclor 1016	ND			
Aroclor 1221	ND			
Aroclor 1232	ND			
Aroclor 1242	ND			
Aroclor 1248	ND			
Aroclor 1254	ND			
Aroclor 1260	ND			
Total: PCB Concentration	ND			
Reporting Limit (RL)	0.6			

Remarks: mg/Kg = Milligrams per kilograms
ppm = Parts per million by weight

ND = None Detected (less than RL)
<RL = Below the reporting limit of instrument

Sampled by: Client
Analyzed by: Evelyn Ahulu **Date:** 09/02/2014
Reviewed by: Nick Ly **Date:** 09/02/2014

Nick Ly, Technical Director

Preparation of these samples were conducted in accordance with EPA Method 3546 or other published test methods as noted in this report. Unless stated otherwise, the condition of all samples was acceptable at time of receipt. Reported sample results are based on dry weight and method QC results are acceptable unless stated otherwise. If samples were not collected by NVL personnel, then the accuracy of the results is limited by the methodology and acuity of the sample collector. This report shall not be reproduced except in full, without written approval of NVL Laboratories, Inc.. Responsibility for interpretation of the reported data rests with the client.

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Analysis Report
Polychlorinated Biphenyls (PCBs)

NVL LABS INDUSTRIAL HYGIENE SERVICES

Client: Rainier Commons, LLC
Address: 918 S. Horton Street, Suite 101
Seattle, WA 98134

Attention: Mr. Doug Lansing
Project Location: 3100 Airport Way S. Seattle, WA 98134

NVL Batch No. 1416152.00
Method No.: EPA 8082
Client Project #: 2012-494
Date Received: 9/12/2014
Matrix: Bulk
Samples Received: 3
Samples Analyzed: 3

Lab Sample ID:	14120205	14120206	14120207	BLDG 10 & 11
Client Sample ID:	91214PCB1	91214PCB2	91214PCB3	
Sample Description:	Scaffold Core Bldg. 11	Scaffold Core Bldg. 10	Poly and Tyvek Bldg. 11	
Sample Weight (g)	2.2289	2.0478	9.1725	
PCB Type	mg/Kg(ppm)	mg/Kg(ppm)	mg/Kg(ppm)	
Aroclor 1016	ND	ND	ND	
Aroclor 1221	ND	ND	ND	
Aroclor 1232	ND	ND	ND	
Aroclor 1242	ND	ND	ND	
Aroclor 1248	ND	ND	ND	
Aroclor 1254	ND	ND	ND	
Aroclor 1260	ND	ND	ND	
Total: PCB Concentration	ND	ND	ND	
Reporting Limit (RL)	0.9	1.0	0.2	

Remarks: mg/Kg = Milligrams per kilograms
ppm = Parts per million by weight
ND = None Detected (less than RL)
<RL = Below the reporting limit of instrument

Sampled by: Client
Analyzed by: Evelyn Ahulu
Date: 09/12/2014

DRAFT

Preparation of these samples were conducted in accordance with EPA Method 3546 or other published test methods as noted in this report. Unless stated otherwise, the condition of all samples was acceptable at time of receipt. Reported sample results are based on dry weight and method QC results are acceptable unless stated otherwise. If samples were not collected by NVL personnel, then the accuracy of the results is limited by the methodology and acuity of the sample collector. This report shall not be reproduced except in full, without written approval of NVL Laboratories, Inc.. Responsibility for interpretation of the reported data rests with the client.

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Analysis Report
Polychlorinated Biphenyls (PCBs)

NVL LABS INDUSTRIAL HYGIENE SERVICES

Client: Rainier Commons, LLC
Address: 918 S. Horton Street, Suite 101
Seattle, WA 98134

Attention: Mr. Doug Lansing
Project Location: Rainier Commons

NVL Batch No. 1415463.00
Method No.: EPA 8082
Client Project #: A14067
Date Received: 9/2/2014
Matrix: Bulk
Samples Received: 1
Samples Analyzed: 1

Lab Sample ID:	14116857			
Client Sample ID:	001	BLDG 13		
Sample Description:	Wall poly and suits			
Sample Weight (g)	9.9555			
PCB Type	mg/Kg(ppm)			
Aroclor 1016	ND			
Aroclor 1221	ND			
Aroclor 1232	ND			
Aroclor 1242	ND			
Aroclor 1248	ND			
Aroclor 1254	31.0			
Aroclor 1260	4			
Total: PCB Concentration	35.0			
Reporting Limit (RL)	2.0			

Remarks: mg/Kg = Milligrams per kilograms
ppm = Parts per million by weight
ND = None Detected (less than RL)
<RL = Below the reporting limit of instrument

Sampled by: Client
Analyzed by: Evelyn Ahulu
Date: 09/03/2014

DRAFT

Preparation of these samples were conducted in accordance with EPA Method 3546 or other published test methods as noted in this report. Unless stated otherwise, the condition of all samples was acceptable at time of receipt. Reported sample results are based on dry weight and method QC results are acceptable unless stated otherwise. If samples were not collected by NVL personnel, then the accuracy of the results is limited by the methodology and acuity of the sample collector. This report shall not be reproduced except in full, without written approval of NVL Laboratories, Inc.. Responsibility for interpretation of the reported data rests with the client.

ATTACHMENT 4

RYAN SWANSON
Lawyers since 1897

Ryan, Swanson & Cleveland, PLLC
1201 Third Avenue, Suite 3400
Seattle, WA 98101-3034
206.464.4224 | Fax: 206.583.0359
Toll-free: 1.800.458.5973
www.ryanswansonlaw.com

Jo M. Flannery
Attorney Of Counsel

direct dial 206.654.2241
flannery@ryanlaw.com
Ref. No. 1780160.01/015435.00010

October 9, 2018

Michelle Mullin, Project Manager
Dave Bartus, Interim Project Manager
U.S. Environmental Protection Agency - Region 10
1200 Sixth Avenue, Suite 900, OCE-084
Seattle, WA 98101

Re: Rainier Commons Phase I Close Out Report – Supplement to Response to Request for Additional Information

Dear Ms. Mullin and Mr. Bartus,

We recently provided the responses and additional information that EPA requested in connection with your review of the Rainier Commons IPWP Phase I Close Out Report. With respect to substrate testing, two of the samples collected came back with results at 1.1 ppm and 1.6 ppm PCBs, just slightly exceeding the level allowed for wholly unrestricted High Occupancy use. While these areas are Low Occupancy areas, under the PCB regulations, it was unclear whether the full EPA protocol for gathering these samples for porous substrate material had been performed, when those samples were first collected. Therefore, Rainier Commons collected additional substrate samples from those two areas, co-located just adjacent to the original samples.

The results of the additional substrate samples are non-detect for PCBs. One sample is concrete and one sample is sandstone. The field notes and photographs documenting this additional sampling are attached hereto as a supplement to the Phase I Close Out Report.

Please let us know if you have any additional questions on the Close Out Report.

Very truly yours,

RYAN, SWANSON & CLEVELAND, PLLC

Jo M. Flannery
Attorney Of Counsel

JMF:rw
Enclosure
cc: Alex Fidis, EPA Regional Counsel

Rainier Commons Exterior Paint Removal Project

Daily Observations & Activity Report

(Note Date, Report # and Page #on each sheet)

Date: 9-27-18 Daily Report #:

Notes on Daily Observations and Activities
0700 TWO OF EIGHT PREVIOUSLY SAMPLED - POST CLEARANCE - SUBSTRATE SAMPLES CONTAINED PCB LEVELS SLIGHTLY HIGHER THAN 1 PPM. DOCUMENTATION AND PHOTOS ARE SOMEWHAT UNCLEAR WHETHER THE "EPA SOP FOR SAMPLING POUROUS SURFACES FOR POLYCHLORINATED BI-PHENOLS" WERE FOLLOWED AS TO EACH COMPONENT OF THE SAMPLING PROCEDURE, PARTICULARLY AS IT PERTAINS TO SURFACE PREPARATION - SECTION 9.1.1. THEREFORE, WE WILL RETEST THE TWO SAMPLED AREAS IN QUESTION.
0730 YOUVAL AND I LOCATED THE PREVIOUS SAMPLE COLLECTION AREA FOR BUILDING 13, WEST ELEVATION.
0735 A CLEAN, NYLON BRISTLE BRUSH WAS USED TO REMOVE ANY DEBRIS FROM THE SAMPLE AREA. THE BRUSH WAS THEN RINSED WITH

INSPECTOR

Signature 9.27-18 Date

- Include reasons for non-satisfactory responses noted in Daily Inspection Checklist
- If referring to any item from Daily Inspection Checklist, give row #
- Submit Daily Inspection Checklist and Daily Observations/Activity Report along with sample submission and data sheets to NVL Labs

Rainier Commons Exterior Paint Removal Project

Daily Observations & Activity Report
(Note Date, Report # and Page #on each sheet)

Date: 9-27-18 Daily Report #:

Notes on Daily Observations and Activities

0735 CONT. XYLENE FOR SUBSEQUENT USE.

0740 NEW MASKING PAPER AND TAPE WAS APPLIED TO THE WALL SURFACE TO "CATCH" THE SUBSTRATE DUST GENERATED BY DRILLING

0745 A 5/8" DIA. ROTO-HAMMER BIT WAS CLEANED WITH XYLENE AND AN UN-USED CLOTH RAG, PRIOR TO USE.

0750 TWO HOLES ≃ ½" DEEP WERE DRILLED ADJACENT TO THE OLD TEST HOLES AND THE DUST COLLECTED INTO A PLASTIC SAMPLE BAG. SAMPLE # 92718DL-PCB13

0755 THE ROTO-HAMMER BIT WAS CLEANED WITH XYLENE USING A NEW RAGS. CLEANING RAGS AND MASKING WERE COLLECTED FOR PROPER DISPOSAL

0800 LOCATED THE PREVIOUS SAMPLE COLLECTION AREA FOR SANDSTONE ON BUILDING 11, WEST ELEVATION.

INSPECTOR

Signature 9-27-18 Date

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- If referring to any item from Daily Inspection Checklist, give row #
- Submit Daily Inspection Checklist and Daily Observations/Activity Report along with sample submission and data sheets to NVL Labs

Rainier Commons Exterior Paint Removal Project

Daily Observations & Activity Report

(Note Date, Report # and Page # on each sheet)

Date: 9-27-18 Daily Report #:

	Notes on Daily Observations and Activities
0805	THE PREVIOUSLY CLEANED NYLON BRUSH
	WAS USED TO REMOVE ANY DEBRIS.
0810	NEW MASKING PAPER AND TAPE WAS
	APPLIED TO THE SANDSTONE TO FORM A DAM
	TO CATCH THE SUBSTRATE DUST
0815	TWO HOLES ≈ 1/2" DEEP WERE DRILLED NEAR
	THE ORIGINAL TEST HOLES. THE DUST WAS
	COLLECTED INTO A PLASTIC SAMPLE BAG.
	SAMPLE # 92718DL-PCB11
0825	CLEANED THE ROTO-BIT WITH XYLENE.
	COLLECTED MASKING AND RAGS AND PLACED
	THEM IN ON-SITE HAZ-MAT STORAGE BOX
1400	TOOK SAMPLES TO NVL LAB FOR TESTING

INSPECTOR

Signature 9-27-18 Date

Daily Observation / Activity Report (Version 1) (6-11-14) Page 3 of 3

- Include reasons for non-satisfactory responses noted in Daily Inspection Checklist
- If referring to any item from Daily Inspection Checklist, give row #
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Location of previous concrete samples taken for the west elevation of Building 13

*On this and subsequent photographs, the blue cast/tinting is an artifact of the photographic process and is not indicative of actual colors.

Cleaning of concrete substrate utilizing USEPA SOP for Sampling Porous Surfaces for Polychlorinated Biphenyls, Section 9.1.1

Collection of concrete substrate utilizing USEPA SOP for Sampling Porous Surfaces for Polychlorinated Biphenyls, Section 9.1.4. The retest samples were co-located with previous samples.

Cleaning roto-hammer bit after each sample to eliminate risk of cross-contamination between samples

Location of sampling area on Building 11's west elevation.

Previous sampling locations are identified by gloved hand. New sample to be taken just above the blue tape. Spacing between samples is for esthetic purposes.

Cleaning of sandstone substrate utilizing USEPA SOP for Sampling Porous Surfaces for Polychlorinated Biphenyls, Section 9.1.1

Collection of sandstone substrate utilizing USEPA SOP for Sampling Porous Surfaces for Polychlorinated Biphenyls, Section 9.1.4

ATTACHMENT 5

Rainier Commons Exterior Paint Abtement Project
Individual Phased Work Plan - Phase One
Substrate Verification Sampling Summary

Sampling Location	Substrate	Sample #	Pre-Clearance			Post-Clearance			
			8/4/2014	9/29/2014	10/9/2014	12/1/2014	1/30/2015	7/17/2018	9/27/2018
Bldg 13 West	Concrete	8414MK-1	2.5						
		8414MK-2	2.5						
		13015-MG-W					**1.6**		
		92718DL-PCB-13							**N/D**
Bldg 13 South	Concrete	8414MK-3	1.3						
		13015-MG-S					**N/D**		
Bldg 13 East	Concrete	8414MK-4	N/D						
		13015-MG-E					**N/D**		
Bldg 13 North	Concrete	Bldg 13 North		N/D					
		12114-PCB-2				**N/D**			
		13015-MG-N					**N/D**		
Bldg 11 West	Concrete	Bldg 11 West		2.9					
		71718-DL-PCB						**N/D**	
Bldg 10/11 West	Sandstone	10914Bulk2			4.3				
		12114-PCB-1				**1.1**			
		92718DL-PCB11							**N/D**

All sample results reported in Parts Per Million (PPM)
N/D = Non-Detect